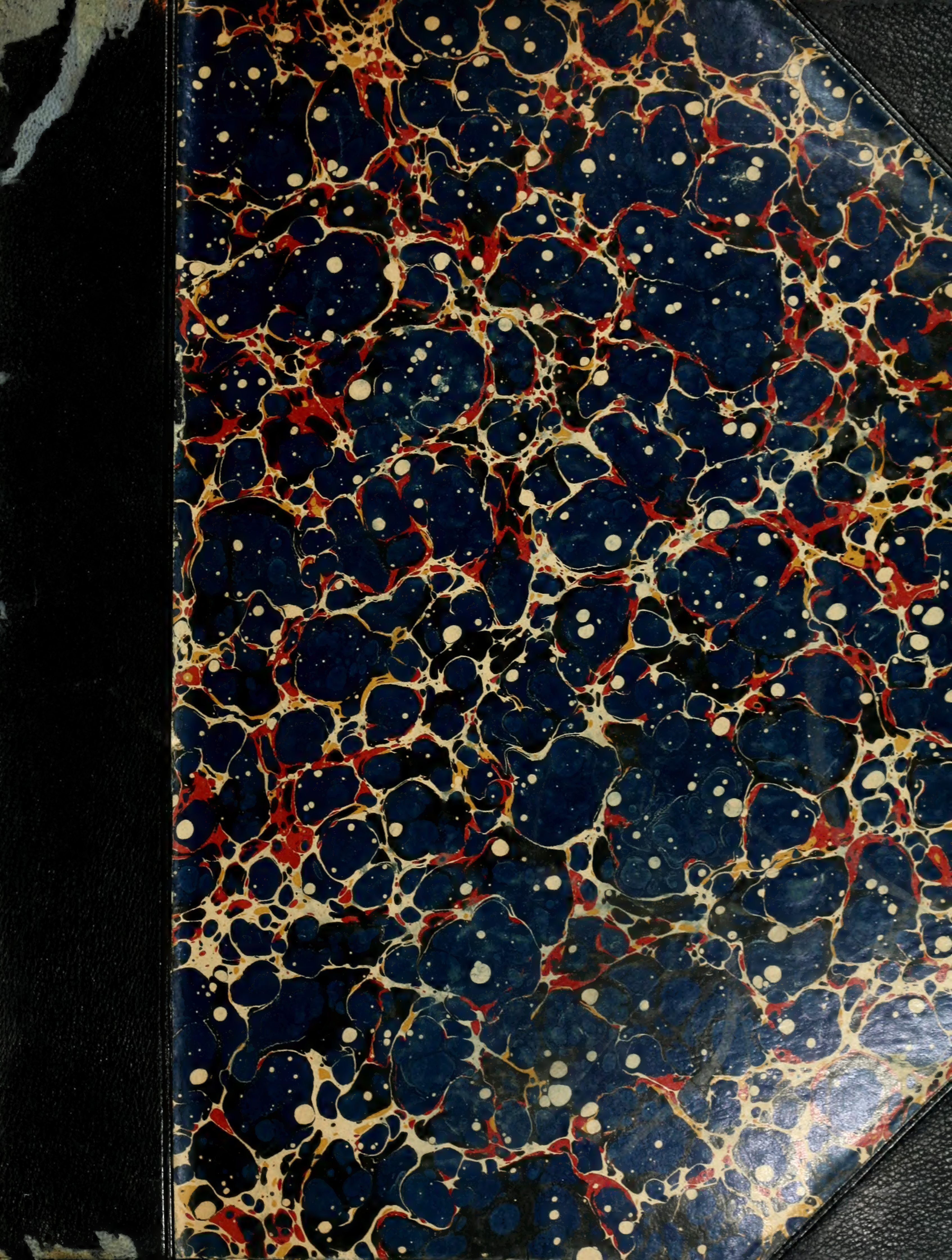

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RESULTS

OF THE

MAGNETICAL AND METEOROLOGICAL

OBSERVATIONS

MADE AT

THE ROYAL OBSERVATORY, GREENWICH,

1858.

26408.

(EXTRACTED FROM THE GREENWICH OBSERVATIONS, 1858.)

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

MAGNETICAL AND METEOROLOGICAL OBSERVATIONS.

1858.

ROYAL OBSERVATORY, GREENWICH.

INDICATIONS

OF

MAGNETOMETERS.

1858.

The establishment of Assistants in the Magnetical and Meteorological Department of the Royal Observatory consisted during the year 1858, of Mr. James Glaisher, the Superintendant, and Mr. Thomas Downs; with three supernumerary assistants, to aid in the observations and reductions.

For description of the three Magnetometers, the method of observing by the Telescope, and the method of reducing the observations, the reader is referred to the *Greenwich Magnetical and Meteorological Observations* for 1847, Introduction, page i to xlii; and to corresponding parts of the preceding volumes.

During the year 1858, Telescope-Observations of the Magnetometers have usually been made four times every day, except on Sundays, on which days two or three observations only have been taken; but, though these observations are employed in forming the base-lines on the Photographic sheets, their immediate results are not necessarily given in the following pages.

Observations were made of the reading of the Horizontal Circle of the Theodolite by which the DECLINATION MAGNET is observed, corresponding to the Astronomical Meridian, on January 26, February 4, March 29, April 13, May 4, 18, July 21, August 26, 28, September 13, October 15, 30, November 10, 22, and December 20.

Observations were made of the Collimation of the DECLINATION MAGNETOMETER; of the Torsion-force of its Suspension skein; and of the Collimation of the Theodolite-Telescope; on 1857, December 29, 30, and 31.

Observations of the Angle of Torsion of the HORIZONTAL FORCE MAGNETOMETER were made on 1857, December 29, 30, and 31. The angle determined was 43°. 12′. Observations were made for the times of vibration and readings of the scale for different readings of the torsion-circle on the same days, and the general conclusion was, that the scale-readings were nearly identical and had nearly the same value when the reading of the torsion-circle was 144°. 0′ (marked end West); and 230°. 30′ (marked end East). The reading adopted for the adjustment of the torsion-circle throughout the year (marked end West) was 144°. 0′.

The number used for the variation of horizontal force for a disturbance through one division of the scale, in parts of the whole horizontal force, is 0·0020524.

The correction for temperature is $0{\cdot}0000809 \times (t-32) + 0{\cdot}000000762\ (t-32)^2$, where t is the temperature in degrees of Fahrenheit's scale. This is *not* applied to any of the results of observation.

Observations of the times of vibration of the VERTICAL FORCE MAGNETOMETER in a vertical plane have usually been made three or four times a week. The adopted time of vibration till June 20, was $17^{s}{\cdot}2$; from June 21 to September 8, $18^{s}{\cdot}7$; from September 9 to December 10, $17^{s}{\cdot}3$; and from December 11 to the end of the year, $16^{s}{\cdot}1$. Observations for the time of vibration in a horizontal plane were made in 1853 on January 3 and 4, and the time was found to be $25^{s}{\cdot}0033$ from 10000 vibrations.

The values of the disturbing force, in terms of the whole vertical force, for one division of the scale, are inferred to be 0·001330 till June 20; 0·001125 from June 21 to September 8; 0·001314 from September 9 to December 10; and 0·001517 from December 11 to the end of the year: and these numbers have been used throughout their respective periods.

The correction for temperature is $0{\cdot}00013845 \times (t-32) + 0{\cdot}000004054 + (t-32)^2$. This is *not* applied to any of the results of observation.

The methods adopted in the use of the Photographic Apparatus; in the determination of zeros, both for time and for magnetic indications; and in the translation into numbers of the indications given by the Photographic Traces for arbitrary times; are in every respect the same as those described in the Addendum to the Introduction to the *Greenwich Magnetical and Meteorological Observations*, 1847, pages lxxxiii to xc. The only important alterations that have been made are, that (as mentioned at the end of that Introduction) coal-gas charged with the vapour of coal-naphtha is used to give the light required for forming the Photographic Trace; and that the cylinders carrying the Photographic paper (both that which receives the traces of the Declination Magnet and the Horizontal Force Magnet, and that which receives the traces of the Vertical Force Magnet and the Barometer), are now made to revolve in 24^h. It may be mentioned also that, commencing with the year 1858, the observations are referred to Greenwich Mean Time instead of Göttingen Mean Time as heretofore.

It is proper to add, that, in measuring the ordinates of the Vertical Force Curves, the same difficulty that is mentioned in preceding volumes has still occasionally been felt. Apparently without cause, the curve is dislocated; one part being raised above or depressed below the contiguous part, in the direction of the ordinate, usually by small quantities. In all cases the displacement is accompanied by vibration, the original position being at the extremity of the arc of vibration, and the new position being at its center; showing that there has been no want of delicacy in the movement, and that the change is precisely the same as would be caused by the quiet application of a small weight upon one end of the magnet.

In general the ordinates of the Photographic Curves have been measured so frequently, including all maxima and minima, that a reader, laying down a succession of points by means of the given times as abscissæ and the given measures of force as ordinates, connecting these points by straight lines, and attending to the symbols as explained in the foot notes, will very nearly produce the original curves.

At the times when the Vertical Force Trace is dislocated, two ordinates have been taken for the same abscissæ; these are connected by a brace, and the difference of the numbers indicates the amount of the disturbance.

Greenwich Mean Solar Time.	Western Declination.
h m	° ′ ″
Jan. 2	
0. 32	21. 37. 55
0. 54	38. 0
2. 29	36. 30
2. 47	35. 40
3. 58	34. 30
4. 12	35. 5
4. 22	34. 10
5. 9	36. 35
5. 23	36. 20
5. 45	37. 20
5. 58	34. 40
6. 6	35. 5
6. 13	33. 10
6. 21	38. 35
6. 31	36. 15
6. 52	38. 10
7. 4	34. 15
7. 25	36. 0
7. 47	32. 20
8. 1	32. 55
8. 48	32. 0
9. 6	32. 30
9. 15	32. 0
9. 26	32. 30
10. 0	31. 40
10. 12	32. 10
10. 29	31. 35
10. 44	32. 10
11. 0	31. 15
11. 33	32. 55
11. 47	31. 40
13. 32	33. 30
13. 55	33. 10
14. 19	33. 50
14. 30	33. 30
16. 22	34. 10
16. 51	33. 30
17. 22	33. 40
17. 36	33. 5
17. 43	33. 40
19. 38	31. 50
21. 22	34. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
Jan. 2	
0. 30	·1086
3. 2	·1094
3. 51	·1106
4. 7	·1097
4. 29	·1104
	***
5. 0	·1104
	***
5. 44	·1088
6. 7	·1090
6. 15	·1110
6. 27	·1089
6. 45	·1086
6. 59	·1078
7. 13	·1092
7. 43	·1087
8. 2	·1095
9. 0	·1098
	***
10. 2	·1090
	***
15. 40	·1099
18. 40:	·1107
21. 0:	·1099
23. 59	·1095

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Jan. 1	
	(†)
1. 0	·01254*
1. 30	·01212
2. 14	·01138
4. 14	·00784
4. 41	·00807
7. 25	·00771
10. 22	·00778
10. 40	·00757
12. 15	·00747
16. 52	·00800
20. 13	·00890
23. 15	·01000
23. 45	·01004
Jan. 2	
	(†)
1. 0	·00940*
3. 15	·00846
5. 40	·00790
6. 39	·00804
6. 43	·00795
10. 12	·00798
12. 40	·00837
23. 59	·01227

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Jan. 1		
1. 0	47 ·7	47 ·5
3. 0	50 ·2	51 ·0
9. 0	52 ·0	52 ·5
21. 5	48 ·0	50 ·0
Jan. 2		
1. 0	52 ·0	52 ·0
3. 0	53 ·0	53 ·0
9. 0	52 ·1	52 ·5
22. 27	48 ·2	50 ·0

Greenwich Mean Solar Time.	Western Declination.
h m	° ′ ″
Jan. 2	
22. 42	21. 35. 0
22. 56	35. 25
23. 38	34. 45
23. 59	35. 55
Jan. 3	
0. 0	21. 36. 0
0. 54	38. 30
2. 42	36. 40
3. 14	35. 15
4. 4	35. 30
4. 27	34. 0
4. 43	33. 35
5. 45	35. 10
5. 53	34. 50
6. 26	37. 0
	***
7. 16	35. 30
7. 41	36. 15
8. 21	28. 35
	***
8. 58	32. 0
9. 15	32. 0
9. 22	31. 45
9. 36	32. 20
9. 58	30. 50
	***
11. 3	30. 40
11. 30	32. 30
11. 48	32. 10
12. 3	33. 0
12. 17	32. 30
12. 33	33. 10
12. 46	31. 30
12. 53	31. 30
13. 16	28. 30
13. 47	28. 45
14. 11	26. 40
14. 27	27. 25
14. 49	26. 40
15. 15	29. 15
15. 32	28. 40
15. 50	28. 45
16. 20	30. 50
16. 30	30. 5
16. 58	30. 5
17. 11	29. 5
17. 15	33. 0
17. 45	30. 30
18. 45	31. 30
	***
19. 52	30. 0
	***
20. 1	33. 0
	***
20. 30	30. 45
20. 51	32. 35
21. 8	31. 50

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
Jan. 3	
0. 0	·1095
2. 40	·1107
3. 43	·1112
4. 40	·1106
5. 55	·1118
6. 30	·1110
6. 52	·1112
7. 45	·1112
	***
8. 15	·1099
8. 27	·1106
	***
8. 57	·1104
9. 10	·1114
9. 16	·1105
	***
10. 40	·1119
10. 55	·1116
11. 15	·1122
12. 0	·1124
14. 36	·1119
15. 19	·1126
16. 30:	·1122
	***
17. 44	·1129
18. 25	·1126
18. 51	·1129
	***
20. 25	·1127
	***
22. 45	·1099
23. 59	·1084

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Jan. 3	
0. 0	·01227
7. 0	·01497
8. 51	·01489
12. 43	·01424
17. 28	·01380
23. 0	·01400
23. 59	·01344

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Jan. 3		
6. 26	46 ·2	47 ·6
21. 0	41 ·3	44 ·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

The Declination and Horizontal Force Magnets were under adjustment till January 2.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 3								
h m	° ′ ″	h m		h m		h m		
21. 26	21. 33. 40							
21. 38	33. 20							
21. 54	34. 45							
23. 41	37. 40							
	(†)							
Jan. 4		Jan. 4		Jan. 4		Jan. 4		
	(†)	0. 0	·1084	0. 0	·01344	1. 0	45 ·0	46 ·2
0. 33	21. 36. 40		***	1. 30	·01220	3. 0	48 ·0	48 ·0
1. 14	38. 30	4. 13	·1103	6. 48:	·00741	9. 0	46 ·0	46 ·6
2. 15	37. 45	5. 0	·1112	9. 30	·00824	21. 0	37 ·0	40 ·0
2. 27	37. 0	6. 17	·1108	14. 21	·01177			
2. 51	36. 20	7. 25	·1116	15. 57	·01380			
2. 58	36. 30		***	22. 30	{ ·01447			
3. 11	35. 50	8. 15	·1117		{ ·01350			
4. 52	33. 40	9. 0	·1116	23. 21	·01360			
5. 27	33. 30	9. 32	·1139		(†)			
6. 0	33. 40	10. 0	·1126					
6. 22	32. 15		***					
7. 12	33. 30	10. 35	·1122					
8. 7	32. 45		***					
8. 18	33. 25	12. 25	·1125					
9. 3	31. 40	13. 15	·1128					
9. 17	26. 10		***					
	***	14. 25	·1126					
10. 30	32. 0		***					
11. 0	31. 45	18. 15	·1147					
	***	19. 13	·1144					
12. 52	33. 30	20. 15:	·1146					
13. 17	32. 50	21. 10	·1136					
	***	22. 30	·1137					
14. 52	34. 0	23. 59	·1134					
15. 19	33. 20							
16. 55	35. 30							
17. 13	34. 20							
	***							
20. 53	33. 20							
22. 22	33. 30							
23. 12	34. 0							
	***							
23. 59	36. 25							
Jan. 5		Jan. 5		Jan. 5		Jan. 5		
0. 0	21. 36. 25	0. 0	·1134		(†)	1. 0	39 ·9	41 ·5
	***		***	0. 52	·01330	3. 0	42 ·7	44 ·0
0. 27	35. 50	2. 44	·1124	2. 58	·01200	9. 0	42 ·3	42 ·7
0. 45	37. 15	2. 55	·1128	7. 21:	·00916	21. 8	37 ·0	39 ·5
1. 14	36. 40	3. 13	·1124	11. 28	·00904			
	***		***	16. 52	·00996			
2. 26	37. 25	4. 8	·1128	22. 25	·01258			
2. 42	36. 30	5. 15	·1138		(†)			
2. 54	37. 15		***					
3. 15	36. 0	6. 55	·1136					
	***		***					
5. 12	34. 10	7. 15	·1129					
6. 45	35. 30	7. 37	·1133					
7. 48	32. 35	7. 47	·1128					
8. 30	35. 30	8. 30	·1138					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 5		Jan. 5						
h m	° ′ ″	h m						
9. 2	21. 35. 30	9. 0	·1135					
9. 30	31. 40	9. 29	·1134					
	(†)	9. 44	·1135					
10. 32	30. 40	10. 7	·1147					
10. 54	29. 50	10. 20	·1138					
11. 11	30. 40	11. 3	·1128					
11. 19	30. 5	12. 7	·1136					
11. 43	30. 30	12. 13	·1135					
12. 4	32. 20	13. 14	·1144					
12. 15	31. 40	13. 47	·1138					
12. 39	31. 35		***					
13. 5	32. 25	15. 50:	·115[illegible]					
13. 30	31. 10		***					
13. 53	32. 35	22. 25	·1140					
14. 7	31. 40		(†)					
14. 32	33. 40							
14. 55	32. 15							
15. 21	34. 0							
15. 39	32. 40							
15. 59	34. 35							
	***							
19. 12	33. 30							
19. 24	34. 30							
19. 42	33. 40							
20. 4	34. 30							
20. 18	34. 0							
20. 40	35. 0							
20. 53	34. 30							
21. 30	35. 30							
21. 46	34. 45							
22. 1	35. 40							
22. 18	35. 30							
23. 23	34. 15							
23. 42	35. 25							
23. 59	35. 35							
Jan. 6		Jan. 6		Jan. 6		Jan. 6		
0. 0	21. 35. 35		(†)		(†)	1. 0	39 ·0	40 ·0
0. 12	35. 35	0. 35	·1120	1. 0	·01292*	3. 0	40 ·9	41 ·0
0. 27	39. 25	0. 59	·1125	2. 28	·01305	9. 0	39 ·5	41 ·2
0. 49	37. 0	1. 7	·1118	7. 0	·01106	21. 5	36 ·0	38 ·0
1. 3	36. 30	1. 29	·1119	10. 15	·01115			
1. 22	39. 30		***	19. 55	·01346			
1. 30	38. 10	2. 0	·1128	22. 17	·01462			
1. 36	40. 0	2. 15	·1116		(†)			
1. 51	36. 30	2. 30	·1127					
2. 5	36. 35		***					
3. 14	34. 30	3. 30	·1132					
3. 52	34. 30		***					
4. 11	33. 45	6. 16	·1131					
4. 54	33. 30		***					
5. 30	34. 0	7. 53	·1134					
7. 25	32. 30		***					
7. 37	30. 40	8. 40	·1140					
8. 0	33. 25		***					
8. 19	31. 20	9. 35	·1124					
8. 30	31. 15	9. 59	·1132					
8. 56	34. 5	10. 15	·1128					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 6		Jan. 6						
h m	° ′ ″	h m		h m		h m	°	°
9. 12	21. 31. 30	10. 45	·1126					
10. 0	30. 45	12. 4	·1130					
10. 13	31. 30	12. 30	·1126					
10. 23	31. 15	14. 46	·1130					
10. 39	32. 0	17. 20	·1136					
12. 12	31. 55	19. 7:	·1142					
12. 47	33. 5		***					
13. 12	33. 10	23. 0	·1120					
13. 26	33. 30		(†)					
14. 11	33. 15							
14. 37	33. 35							
16. 26	32. 40							
17. 51	33. 20							
18. 18	32. 55							
20. 54	34. 30							
	***							
21. 26	37. 0							
21. 34	35. 30							
22. 26	35. 30							
22. 45	37. 0							
22. 54	36. 35							
23. 4	36. 45							
	(†)							
Jan. 7		Jan. 7		Jan. 7		Jan. 7		
	(†)		(†)		(†)	1. 0	38·0	42·0
0. 43	21. 36. 40	1. 30	·1118	1. 0	·01081*	3. 0	41·2	43·4
2. 12	36. 0	1. 46	·1114	3. 2	·00977	9. 0	41·7	42·4
2. 43	19. 20	3. 15	·1125	7. 57:	·00772	21. 8	41·7	44·2
2. 50	20. 20	3. 57	·1131	18. 7:	·00992			
3. 10	20. 15		***	22. 45	{ ·00817 ·00650			
3. 36	39. 40	8. 45	·1136					
3. 43	37. 5	10. 15	·1136	23. 45	{ ·00667 ·00745			
4. 12	37. 45	10. 44	·1142					
4. 47	37. 30	11. 0	·1136	23. 59	·00728			
5. 16	35. 20	11. 16	·1142					
	***	11. 44	·1134					
7. 36	32. 10	11. 57	·1140					
	***		***					
8. 28	33. 0	12. 40	·1136					
9. 5	29. 10	12. 59	·1129					
9. 14	31. 55	13. 35	·1133					
9. 30	32. 20		***					
9. 43	34. 0	16. 16	·1137					
10. 45	31. 45	16. 48	·1135					
11. 0	32. 40	18. 15	·1138					
11. 22	31. 0	19. 7	·1141					
11. 52	31. 40		***					
12. 40	28. 30	21. 23	·1134					
13. 5	28. 40	22. 30	·1120					
13. 28	23. 40	23. 0	·1120					
14. 12	21. 55	23. 45	·1114					
14. 45	21. 9. 40	23. 59	·1122					
16. 18	20. 59. 10							
	***							
17. 5	59. 20							
17. 19	20. 58. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 7								
h m	° ′ ″	h m		h m		h m	°	°
17. 38	21. 0. 25							
	***							
20. 12	20. 58. 30							
20. 45	21. 0. 40							
21. 27	33. 0							
21. 45	32. 40							
22. 13	34. 20							
23. 12	34. 30							
23. 21	42. 45							
23. 29	41. 45							
23. 32	43. 30							
23. 55	41. 40							
23. 59	36. 30							
Jan. 8		Jan. 8		Jan. 8		Jan. 8		
0. 0	21. 36. 30	0. 0	·1123	0. 0	·00728	1. 0	45·5	47·2
0. 11	39. 35	0. 30	·1125	2. 32	{ ·00797 ·00880	3. 0	48·0	49·0
0. 15	35. 45		***			9. 10	50·3	51·2
	(†)	2. 4	·1124		***	21. 0	50·0	52·0
1. 22	36. 0	3. 15	·1121	5. 10	{ ·00880 ·00990			
1. 43	36. 30		***					
1. 52	52. 50	4. 10	·1156	7. 13	·01012			
1. 59	47. 30	4. 20	·1152		***			
2. 8	49. 30	4. 30	·1161	9. 30	·00931			
2. 12	47. 40	4. 55	·1134	9. 53	·00934			
2. 16	49. 35	5. 7	·1144	10. 11	{ ·00906 ·01020			
2. 30	46. 30	5. 20	·1118					
2. 57	48. 30	5. 38	·1130	10. 56	·00995			
	***		***		***			
3. 15	44. 50	6. 0	·1116	11. 50	·00870			
3. 30	32. 10	6. 15	·1108	12. 12	·00743			
3. 34	36. 45		***	12. 30	·00476			
3. 41	32. 45	6. 54	·1107	12. 43	·00490			
4. 27	30. 30	7. 11	·1120	12. 58	·00628			
4. 44	32. 40	7. 27	·1108	13. 15	·00630			
5. 0	31. 0	7. 43	·1118	13. 51	·00747			
5. 12	32. 20	7. 46	·1114	14. 45	·00858			
6. 29	31. 10	7. 50	·1119	16. 40	·00963			
7. 5	28. 15	8. 14	·1113	17. 30	·00924			
7. 21	28. 55	8. 30	·1116	17. 45	·00956			
7. 36	26. 45	8. 40	·1105		***			
9. 0	28. 55	8. 57	·1116	19. 0	·00948			
9. 36	9. 20	9. 7	·1111	19. 11	·01038			
10. 0	11. 5	9. 29	·1113	19. 27	·00972			
10. 50	2. 30	9. 36	·1100	19. 40	·01013			
11. 29	7. 30	9. 52	·1114	19. 58	·01014			
11. 45	6. 20	10. 3	·1100		***			
11. 57	2. 20		***	20. 40	·01080			
12. 13	11. 15	10. 43	·1078		***			
12. 28	8. 20		***	20. 43	·01027			
12. 39	11. 0	11. 10	·1090	21. 15	·01092			
13. 20	7. 30	11. 18	·1078		(†)			
13. 55	8. 50	11. 30	·1082					
14. 13	11. 15	11. 42	·1072					
14. 50	10. 55	12. 1	·1018					
15. 0	9. 55	12. 16	·1100					
16. 12	10. 0	12. 31	·1052					
16. 36	12. 20	12. 45	·1093					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

January 7^{d}. 14^{h}. No reason can be assigned for the great decrease in the Declination about this time ; the magnet assumed its ordinary reading again at about 21^{h}.

Greenwich Mean Solar Time.	Western Declination.
Jan. 8	
h m	° ′ ″
15. 44	21. 11. 0
16. 54	12. 0
17. 7	10. 30
17. 13	13. 50
	***
17. 39	7. 35
17. 52	13. 0
17. 56	9. 30
17. 59	13. 55
18. 12	8. 25
18. 24	15. 10
18. 43	11. 30
19. 24	5. 10
	***
20. 13	12. 5
20. 24	26. 10
20. 40	14. 0
20. 45	21. 10
20. 47	16. 20
20. 56	21. 55
21. 5	21. 0
	***
21. 30	28. 10
21. 39	39. 0
21. 58	39. 30
22. 0	42. 40
22. 9	21. 41. 50
22. 14	22. 0. 45
	(†)
23. 15	22. 0. 5
23. 45	21. 54. 30
23. 54	56. 0
23. 59	52. 15
Jan. 9	
0. 0	21. 52. 15
0. 8	52. 20
0. 26	47. 30
0. 39	51. 45
0. 50	50. 5
	(†)
1. 40	36. 40
	***
3. 0	33. 30
3. 30	33. 0
4. 25	34. 0
	***
7. 15	33. 35
8. 30	34. 25
11. 0	34. 55
15. 40	34. 0
18. 0	34. 0
	***
19. 45	33. 0
20. 17	35. 0
20. 25	34. 10
21. 0	36. 25
21. 25	35. 20
21. 57	21. 36. 30
22. 30	41. 0
23. 59	38. 30
Jan. 10	
0. 0	21. 38. 30
0. 25	38. 10
	***
1. 0	41. 35
1. 18	39. 25
2. 5	37. 5
2. 30	37. 30
2. 45	35. 20
4. 0	34. 0
4. 15	32. 50
4. 45	33. 0
5. 7	31. 30
	***
5. 28	32. 55
5. 55	32. 0
6. 23	34. 30
6. 45	33. 30
7. 25	33. 40
7. 42	31. 55
	***
8. 28	33. 15
9. 13	32. 0
9. 30	33. 0
9. 47	32. 0
10. 15	33. 25
10. 40	32. 20
11. 58	34. 40
	***
12. 56	33. 0
	***
14. 45	34. 30
15. 10	33. 30
15. 55	34. 50
	***
17. 7	33. 40
	***
20. 35	33. 30
	(†)
22. 50	37. 0
	***
23. 59	40. 30
Jan. 11	
0. 0	21. 40. 30
0. 40	40. 0
2. 25	37. 30
2. 52	35. 30
3. 44	34. 30
4. 15	33. 40

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Jan. 8	
h m	
13. 0	·1071
13. 10	·1061
13. 34	·1083
	***
14. 20	·1070
	***
15. 20	·1100
16. 15	·1105
16. 35	·1113
	***
17. 5	·1098
17. 25	·1132
	***
17. 50	·1108
	***
18. 15	·0988
18. 30	·1107
18. 44	·1055
19. 2	·1100
19. 16	·1088
19. 30	·1108
19. 32	·1075
	***
19. 58	·1148
20. 12	·0972
	***
20. 30	·1074
	***
21. 8	·1106
	***
22. 15	·1051
22. 30	·1071
23. 59	·1087
Jan. 9	
0. 0	·1087
	***
0. 40	·1089
1. 27	·1083
2. 40	·1088
3. 0	·1086
	***
4. 25	·1094
6. 30	·1092
10. 45	·1101
12. 7	·1104
16. 0	·1110
19. 45:	·1118
	***
21. 40	·1109
23. 59	·1098
Jan. 10	
0. 0	·1098
	***
0. 55	·1111
	***
1. 46	·1106
	***
2. 23	·1111
2. 44	·1106
3. 0	·1109
3. 15	·1107
3. 45	·1108
4. 14	·1102
4. 28	·1106
4. 43	·1106
5. 40	·1110
5. 55	·1116
6. 14	·1118
6. 30	·1114
6. 45	·1116
7. 30	·1110
	***
8. 28	·1118
9. 43	·1110
	***
10. 7	·1115
10. 20	·1112
10. 58	·1113
11. 4	·1116
11. 16	·1114
11. 45	·1130
12. 7	·1118
12. 45	·1115
	***
15. 32	·1114
16. 30	·1117
17. 30	·1119
18. 0	·1116
19. 0:	·1118
20. 30	·1106
20. 46	·1106
	(†)
23. 0	·1090
	***
23. 59	·1080
Jan. 11	
0. 0	·1080
	***
1. 45	·1094
2. 37	·1092
	***
8. 25	·1110
	***

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Jan. 9	
0. 0	·01960
2. 0	·01858 ·01910
5. 52	·01864
9. 51:	·01857
16. 15	·02322
21. 1	·02244
23. 21	·02270 ·02160
23. 59	·02137
Jan. 10	
0. 0	·02137
2. 0	·02040
6. 39	·01760
8. 52	·01685 ·01740
12. 23	·01683
21. 15	·01710 ·01754
23. 12	·01757
23. 59	·01780
Jan. 11	
0. 0	·01780
2. 0	·01837 ·01960
8. 3:	·01837
14. 14	·02287
22. 11	·02150

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Jan. 9		
1. 0	52·0	51·9
3. 0	53·2	53·3
9. 10	54·3	54·5
22. 20	47·0	47·5
Jan. 10		
9. 0	49·0	51·0
21. 6	50·3	51·5
Jan. 11		
1. 0	53·2	53·0
3. 0	54·8	55·0
9. 0	52·9	52·9
21. 0	42·9	44·2

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 11		Jan. 11		Jan. 11				
h m	° ′ ″	h m		h m		h m	°	°
4. 34	21. 34. 15	9. 17	·1104	23. 15	{ ·02167			
4. 55	33. 10	10. 24	·1116		·02030			
5. 55	35. 0	10. 45	·1114	23. 59	·02037			
	***	11. 2	·1116					
6. 50	35. 0	11. 38	·1113					
9. 16	33. 15	12. 56	·1122					
9. 45	35. 5	13. 7	·1120					
	***	13. 45	·1123					
11. 22	34. 35	17. 15	·1129					
	***	18. 10	·1128					
12. 34	39. 0	18. 46:	·1132					
	***	19. 35	·1127					
18. 0	35. 5	20. 0	·1120					
	***	20. 27	·1126					
20. 0	38. 0	22. 30	·1107					
	***	23. 59	·1107					
21. 0	33. 35							
	***							
23. 27	38. 0							
23. 50	37. 15							
	(†)							
Jan. 12		Jan. 12		Jan. 12		Jan. 12		
	(†)	0. 0	·1107	0. 0	·02037	1. 0	45·2	46·0
0. 10	21. 36. 0	1. 0	·1108	1. 48	·01960	3. 0	48·2	48·5
	***	1. 53	·1104	3. 39	·01705	9. 0	49·0	49·2
1. 35	37. 30	2. 5	·1095	4. 45	·01728	21. 7	46·0	47·0
3. 0	35. 0	3. 20	·1106	10. 25	·01646			
6. 1	32. 5	5. 15	·1109	21. 0	·01858			
6. 18	30. 0	5. 53	·1107	23. 30	·01890			
6. 45	33. 0	6. 7	·1102	23. 59	·01886			
7. 30	33. 50	7. 7	·1107					
8. 58	25. 0		***					
9. 57	30. 30	8. 20	·1103					
10. 53	29. 35		***					
11. 9	31. 20	9. 15	·1112					
12. 25	31. 5		***					
13. 25	34. 0	10. 15	·1106					
13. 55	34. 0		***					
14. 26	32. 0	11. 28	·1107					
15. 0	33. 50	12. 5	·1119					
15. 25	33. 40	13. 30:	·1113					
16. 0	35. 5		***					
16. 55:	33. 0	15. 50	·1122					
18. 30	38. 0	16. 7	·1117					
18. 53	37. 20	16. 35	·1126					
19. 8	38. 40	17. 15	·1124					
19. 35	37. 55	18. 1	·1126					
20. 0	35. 40	18. 20	·1120					
20. 59	36. 50	18. 45	·1124					
21. 30	35. 0	19. 28	·1118					
	***	19. 58	·1120					
22. 13	38. 30	21. 15	·1100					
	***	22. 45	·1097					
23. 0	39. 5	23. 5	·1084					
23. 30	44. 0	23. 59	·1104					
	(†)							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 13		Jan. 13		Jan. 13		Jan. 13		
h m	° ′ ″	h m		h m		h m	°	°
	(†)	0. 0	·1104	0. 0	·01886	1. 0	49·0	49·0
0. 15	21. 41. 0	0. 30	·1092	1. 40	{ ·01714	3. 0	50·8	51·0
0. 25	41. 40	0. 59	·1098		·01800	9. 0	50·0	50·7
0. 38	40. 10	1. 40	·1099		***	21. 0	42·0	44·0
0. 50	42. 35		***	8. 15	·01788			
0. 55	42. 0	2. 25	·1087	11. 0	·01823			
1. 18	42. 30	3. 0	·1104	11. 52	·01869			
1. 26	43. 30	3. 20	·1108	12. 13	·01867			
2. 3	41. 55	3. 32	·1102	13. 45	·01978			
2. 34	37. 0		***	16. 28	·02242			
3. 11	37. 20	4. 30	·1098	21. 54	·02164			
3. 28	38. 20	4. 47	·1107	23. 59	·02203			
3. 43	37. 0		***					
3. 53	37. 0	5. 15	·1106					
4. 11	35. 30	5. 40	·1092					
4. 57	29. 10	6. 5	·1104					
5. 7	30. 45	6. 28	·1106					
5. 12	30. 30	6. 40	·1094					
5. 31	36. 0	6. 59	·1092					
5. 50	31. 55	7. 7	·1087					
6. 11	33. 50	7. 30	·1098					
6. 30	39. 0	7. 40	·1092					
6. 41	38. 30	8. 5	·1109					
6. 58	39. 10	8. 15	·1094					
7. 20	32. 30	8. 29	·1094					
7. 28	32. 35	8. 45	·1100					
7. 44	22. 0	9. 14	·1096					
7. 55	28. 0	9. 59	·1110					
8. 21	28. 0	10. 30	·1104					
9. 3	33. 30	11. 0	·1112					
9. 42	33. 5	11. 29	·1109					
9. 58	35. 30	11. 40	·1127					
10. 26	33. 45	11. 50	·1122					
10. 49	30. 50	12. 15	·1128					
11. 23	32. 55	12. 45	·1108					
11. 43	37. 0	13. 15	·1110					
12. 0	32. 0	13. 35	·1116					
	***		***					
12. 42	34. 45	14. 7	·1114					
12. 56	36. 30	14. 45	·1117					
13. 16	35. 15	17. 5	·1124					
13. 39	37. 0	20. 0	·1124					
14. 9	35. 15		***					
14. 30	36. 20	20. 40	·1126					
	***	21. 5	·1124					
19. 48	34. 20	22. 20	·1104					
	***	22. 45	·1104					
20. 52	34. 0	23. 59	·1108					
22. 21	37. 25							
23. 13	37. 30							
23. 59	34. 45							
Jan. 14		Jan. 14		Jan. 14		Jan. 14		
0. 0	21. 34. 45	0. 0	·1108	0. 0	·02203	1. 0	44·3	45·0
0. 43	36. 40	0. 10	·1110	2. 15:	·02150	3. 0	47·2	47·3
1. 0	36. 20	2. 15	·1116	6. 25	·01646	9. 0	48·0	48·6
2. 13	35. 30	3. 40	·1112	13. 48	·01624	21. 0	42·2	43·0
3. 45	33. 0	5. 5	·1114	15. 30	·01607			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 14		Jan. 14		Jan. 14				
h m	° ′ ″	h m		h m		h m	°	
6. 52	21. 32. 40	6. 0	·1116	20. 30	·01649			
8. 31	32. 0	8. 0	·1114	23. 59	·01710			
10. 26	33. 10	13. 16	·1124					
11. 33	32. 45	13. 30	·1137					
13. 33	33. 50	13. 32	·1133					
13. 45	36. 30	14. 6	·1126					
13. 56	36. 55	14. 15	·1130					
14. 15	36. 0	14. 29	·1126					
14. 26	34. 0	14. 45	·1135					
14. 44	32. 25	15. 0	·1124					
15. 5	33. 10	15. 7	·1131					
15. 17	29. 0	15. 17	·1125					
15. 28	30. 5	16. 6	·1120					
16. 5	29. 45	16. 30	·1124					
16. 25	30. 40		***					
	***	18. 15	·1133					
18. 0	30. 55	18. 30	·1130					
18. 18	29. 10	19. 29	·1130					
18. 47	29. 30	19. 40	·1120					
18. 58	30. 45	20. 15	·1130					
19. 13	29. 10	22. 35	·1114					
19. 30	28. 45	23. 10	·1123					
19. 40	31. 0	23. 59	·1114					
19. 45	30. 0							
19. 51	30. 20							
19. 58	29. 15							
20. 12	31. 55							
20. 30	31. 5							
20. 37	32. 50							
21. 7	32. 0							
	***							
22. 51	33. 30							
23. 8	35. 0							
	***							
23. 59	36. 5							
Jan. 15		Jan. 15		Jan. 15		Jan. 15		
0. 0	21. 36. 5	0. 0	·1114	0. 0	·01710	1. 0	43 ·8	44 ·0
0. 8	35. 30	2. 0	·1110	2. 10:	·02110	3. 0	45 ·5	46 ·0
0. 45	37. 20	3. 0	·1103	4. 42	·01700	9. 0	48 ·5	48 ·5
3. 22	35. 30	4. 5	·1100	9. 40:	·01633	21. 0	46 ·2	47 ·2
3. 52	34. 20	5. 45:	·1107	18. 52	·02177			
4. 40	34. 20		***	21. 22	·02128			
6. 3	33. 0	7. 45	·1107	22. 45	·02157			
6. 26	33. 5	8. 30	·1109		(†)			
6. 41	32. 50	9. 2	·1107					
7. 38	33. 40	10. 30	·1124					
8. 41	33. 55	14. 0	·1119					
8. 58	33. 30	14. 30	·1124					
10. 28	33. 5	15. 14	·1124					
13. 30	35. 30		***					
14. 0	37. 0	19. 35:	·1130					
14. 40	35. 30	22. 15	·1110					
17. 54	34. 55	22. 45	·1117					
20. 29	31. 15		(†)					
22. 19	34. 20							
	(†)							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 16		Jan. 16		Jan. 16		Jan. 16		
h m	° ′ ″	h m		h m		h m		°
	(†)		(†)		(†)	1. 0	49 ·0	49 ·0
0. 50	21. 37. 20	1. 0	·1114	0. 54	·01667	3. 0	51 ·8	51 ·2
4. 9	33. 15	2. 30	·1108	3. 26	·01800	9. 0	50 ·0	50 ·0
5. 13	32. 35	3. 15	·1112	5. 49	·01740	22. 34	44 ·0	46 ·0
7. 9	34. 20	3. 50	·1112	6. 0	·01857			
7. 30	33. 30	4. 30	·1117	7. 12	·01827			
9. 28	33. 35	4. 55	·1114	12. 50	·02017			
	***		***	17. 30	·02296			
12. 12	32. 30	5. 52	·1117	23. 59	·02244			
12. 34	34. 0	6. 15	·1113					
	***	6. 45	·1118					
14. 51	34. 30		***					
15. 15	33. 40	7. 25	·1116					
15. 40	33. 40	8. 0:	·1118					
16. 7	35. 0		***					
16. 26	33. 45	9. 19	·1115					
16. 47	35. 30	9. 25	·1118					
17. 17	33. 45	10. 14	·1116					
18. 40	33. 20	10. 20	·1121					
19. 33	33. 25	10. 30	·1117					
20. 0	33. 0		***					
20. 53	33. 20	11. 45	·1117					
21. 8	32. 55	11. 52	·1126					
21. 34	33. 20	12. 0	·1120					
21. 57	35. 0	12. 27	·1117					
22. 15	35. 30	12. 50	·1123					
22. 29	35. 5		***					
22. 46	37. 5	13. 45	·1120					
23. 4	36. 5	14. 0	·1122					
23. 27	35. 5	14. 10	·1126					
23. 46	35. 5	14. 15	·1122					
23. 53	36. 25		***					
23. 59	36. 0	15. 7	·1126					
			***					
		15. 50	·1123					
			***					
		16. 30	·1125					
			***					
		18. 0	·1122					
		19. 48	·1122					
		20. 45	·1118					
		21. 45	·1121					
		22. 35	·1122					
		23. 59	·1110					
Jan. 17		Jan. 17		Jan. 17		Jan. 17		
0. 0	21. 36. 0	0. 0	·1110	0. 0	·02244	6. 28	43 ·0	45 ·0
1. 37	37. 55	1. 15	·1123	6. 52	·02287	21. 0	39 ·8	41 ·5
1. 55	37. 35	2. 25	·1122	7. 12	·02325			
2. 11	39. 15	2. 36	·1114	9. 40	·02249			
2. 36	38. 35	3. 15	·1108	11. 0	·02247			
2. 52	40. 0	3. 37	·1118	13. 14	·02180			
3. 23	38. 10	3. 53	·1118	16. 11	·02146			
3. 45	38. 40	4. 8	·1125	21. 30	{ ·02150			
3. 56	36. 50	4. 45	·1112		·02038			
4. 26	37. 30	5. 2	·1118	23. 59	·02067			
4. 52	34. 10	5. 10	·1117					
5. 0	35. 0	5. 30	·1126					
			***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 17		Jan. 17						
h m	° ′ ″	h m		h m		h m	°	°
5. 13	21. 33. 35	6. 30	·1124					
5. 29	36. 50	6. 53	·1106					
6. 0	37. 40	7. 15	·1106					
6. 29	32. 30	7. 28	·1117					
6. 41	33. 0	7. 40	·1104					
7. 4	23. 30	7. 52	·1118					
7. 12	23. 45	8. 0	·1104					
7. 31	21. 30	8. 25	·1114					
7. 34	27. 30	8. 32	·1113					
7. 44	25. 15	8. 46	·1118					
7. 53	33. 30	9. 0	·1117					
8. 4	32. 0	9. 33	·1131					
8. 14	32. 50	9. 42	·1124					
8. 26	32. 45	9. 45	·1128					
8. 41	30. 45	10. 2	·1114					
9. 18	32. 50	10. 45	·1117					
9. 30	35. 5	11. 10	·1130					
9. 45	30. 45	11. 20	·1126					
9. 57	33. 40		***					
10. 28	29. 5	11. 50	·1130					
11. 16	33. 40	12. 5	·1126					
11. 30	32. 0	12. 25	·1136					
11. 52	30. 30	13. 0	·1132					
12. 4	32. 30	13. 17	·1139					
12. 16	31. 0	14. 27	·1129					
12. 41	33. 10	15. 10	·1129					
13. 9	30. 30	15. 33	·1135					
13. 33	32. 0	15. 45	·1130					
13. 44	31. 0	16. 45	·1134					
14. 25	31. 10	17. 30	·1129					
14. 43	32. 10	18. 0	·1130					
15. 19	29. 55	19. 50	·1132					
15. 52	33. 25	20. 40	·1128					
16. 19	30. 30	21. 0	·1130					
16. 36	32. 30	22. 0	·1115					
17. 26	33. 40	22. 45	·1112					
17. 40	33. 20	23. 55	·1114					
19. 39	34. 0							
20. 11:	33. 25							
21. 51	37. 10							
22. 44	37. 40							
23. 0	39. 30							
23. 33	38. 55							
23. 59	37. 50							
Jan. 18		Jan. 18		Jan. 18		Jan. 18		
0. 0	21. 37. 50	0. 0	·1116	0. 0	·02067	1. 0	42·8	43·5
0. 43	38. 35	0. 55	·1118	0. 59	{·02017	3. 0	46·4	46·8
0. 57	40. 40	1. 40	·1112		·01937	9. 0	49·5	50·0
2. 9	37. 50		***	3. 0	{·01700	21. 0	44·2	45·2
2. 18	38. 10	3. 15	·1114		·01926			
2. 42	37. 10	3. 30	·1109	4. 21	·01747			
3. 14	37. 15	4. 0	·1108	10. 42	·01672			
4. 30	33. 45	4. 45	·1111	14. 25:	·01720			
4. 39	34. 0	5. 7	·1115	22. 56	·02228			
4. 53	33. 45	5. 30	·1112	23. 59	·02210			
5. 15	34. 20	6. 15	·1112					
7. 39	32. 40	8. 0	·1108					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 18		Jan. 18						
h m	° ′ ″	h m		h m		h m	°	°
10. 1	21. 33. 15	9. 7	·1109					
10. 13	34. 0	10. 5	·1108					
10. 48	28. 25	10. 30	·1104					
11. 30	32. 35	11. 0	·1112					
12. 15	33. 30	11. 22	·1105					
12. 31	32. 30	11. 45	·1100					
	***	12. 0	·1108					
13. 45	34. 30	12. 27	·1114					
14. 4	33. 40	12. 40	·1110					
14. 40	34. 30		***					
14. 59	33. 20	14. 55	·1117					
15. 43	35. 5	15. 30	·1114					
16. 4	34. 15		***					
16. 26	34. 40	17. 45	·1124					
17. 12	33. 35	18. 15	·1120					
17. 30	34. 30	19. 17	·1122					
18. 59	32. 40	19. 45	·1126					
20. 28	33. 30	20. 30:	·1120					
20. 57	32. 0	22. 15	·1100					
21. 42	34. 15		***					
21. 51	34. 0	23. 15	·1100					
22. 29	36. 30	23. 45	·1108					
22. 51	36. 15		(†)					
23. 13	37. 30							
23. 32	37. 30							
	(†)							
Jan. 19		Jan. 19		Jan. 19		Jan. 19		
	(†)		(†)	0. 0	·02210	1. 0	47·2	47·4
0. 8	21. 37. 30	0. 15	·1108	1. 11	·02157	3. 0	50·0	49·7
0. 29	36. 50		***	3. 40	·01788	9. 0	50·5	50·0
1. 30	38. 30	1. 5	·1108	6. 24	{·01775	21. 0	48·5	49·4
2. 12	36. 0	2. 40	·1095		·01940			
2. 38	36. 30	4. 15:	·1105	7. 54	·01870			
3. 19	33. 40	7. 30	·1105	9. 52	·01904			
5. 45	32. 30	9. 0	·1109	16. 56	·02124			
7. 30	33. 10	13. 30	·1114	22. 39	·02176			
8. 58	32. 30	17. 0	·1121	23. 49	·02156			
14. 42	33. 35	20. 0:	·1120		(†)			
15. 12	32. 50	23. 59	·1093					
15. 56	33. 5							
17. 52	32. 30							
18. 39	32. 30							
20. 37	30. 55							
21. 40	31. 0							
23. 59	36. 50							
Jan. 20		Jan. 20		Jan. 20		Jan. 20		
0. 0	21. 36. 50	0. 0	·1093		(†)	1. 0	51·0	50·8
0. 16	37. 5		***	0. 14	·02130	3. 0	53·5	51·5
0. 27	38. 0	2. 0	·1098	0. 58	{·02050	9. 0	52·2	53·2
1. 7	37. 25	2. 15	·1096		·02116	21. 0	43·4	45·0
1. 33	37. 30		***	2. 51	·01917			
2. 58	34. 30	3. 4	·1102	3. 54	{·01877			
3. 41	34. 10		***		·02010			
4. 54	35. 30	6. 0	·1094	5. 15	·01976			
5. 45	37. 55	6. 47	·1100	7. 13	·02048			
6. 30	33. 45	7. 15	·1100	9. 51	·02196			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 20		Jan. 20		Jan. 20				
h m	° ′ ″	h m		h m		h m	°	°
8. 59	21. 31. 55	7. 30	·1102	10. 16	·02200			
9. 31	26. 0	8. 0	·1101	13. 7	·02349			
10. 8	30. 5	9. 10	·1105	23. 30	·02203			
10. 40:	28. 40	9. 40	·1117	23. 59	·02217			
11. 20	31. 0	10. 8	·1102					
13. 3	32. 0	10. 30	·1106					
13. 13	33. 20	11. 30	·1110					
15. 25	33. 20	12. 0	·1108					
15. 45	35. 0	12. 30	·1111					
16. 30	31. 15		***					
19. 13	33. 0	13. 10	·1110					
20. 36	32. 35	13. 29	·1114					
21. 21	31. 0	15. 25	·1114					
21. 54	32. 30	16. 0	·1120					
22. 22	32. 35	16. 45	·1118					
23. 2	33. 15	19. 0	·1126					
23. 59	37. 30	20. 45	·1120					
		21. 0	·1116					
			(†)					
Jan. 21		Jan. 21		Jan. 21		Jan. 21		
0. 0	21. 37. 30	0. 10	·1112	0. 0	·02217	1. 0	45·3	45·7
0. 41	36. 45		***	1. 36	·02217	3. 0	48·0	47·4
1. 4	37. 50	3. 45	·1116	9. 45:	·01640	9. 0	48·2	48·4
2. 47	34. 35		***	18. 43	·02183	21. 0	41·0	43·0
3. 7	33. 30	7. 45	·1127	23. 59	·02150			
4. 11	32. 5		***					
7. 45	32. 30	12. 45	·1140					
8. 4	31. 30	13. 0	·1136					
11. 40	34. 25	13. 15	·1136					
13. 7	32. 30	13. 35	·1142					
14. 40	35. 30	15. 0	·1142					
	***	17. 0	·1147					
17. 45	33. 30	20. 0:	·1156					
18. 7	33. 50		***					
	***	22. 0	·1136					
20. 11	32. 30	23. 0	·1131					
22. 8	36. 45	23. 59	·1127					
22. 41	36. 25							
23. 37	37. 45							
23. 59	36. 30							
Jan. 22		Jan. 22		Jan. 22		Jan. 22		
0. 0	21. 36. 30	0. 0	·1127	0. 0	·02150	1. 0	44·4	44·6
0. 45	37. 30	1. 30	·1128	2. 27	·01964	3. 0	46·8	47·0
1. 13	36. 55	1. 50	·1124	5. 17	·01628	9. 0	46·5	48·0
3. 38	34. 0	2. 31	·1126	7. 53	·01607 ·01738	21. 0	41·7	43·5
4. 26	34. 10	2. 45	·1122					
4. 40	33. 20	3. 30	·1122	11. 22	·01786			
5. 12	34. 15	4. 30	·1127	13. 11	·01865			
5. 31	32. 25	4. 45	·1122	14. 15	·01902			
5. 39	32. 45	5. 20	·1126	16. 55	·02048			
5. 54	31. 30	5. 45	·1124	19. 52	·02187			
6. 17	34. 20	6. 20	·1124	20. 7	·02170			
6. 30	33. 40	7. 0:	·1131	23. 59	·02180			
8. 10	33. 40		***					
9. 4	32. 50	10. 0	·1132					
9. 22	32. 20		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 22		Jan. 22						
h m	° ′ ″	h m		h m		h m	°	°
9. 45	21. 32. 50	11. 30	·1138					
10. 8	31. 40	12. 40	·1138					
10. 43	33. 0	13. 10	·1150					
11. 51	32. 50	13. 40	·1147					
12. 34	32. 10	13. 55	·1151					
13. 17	34. 30	14. 15	·1143					
14. 16	30. 5	16. 0	·114					
14. 52:	32. 30	16. 45	·1143					
15. 42	30. 45	17. 33	·1143					
17. 24	34. 0	18. 5	·1149					
17. 57	33. 15	19. 20	·1144					
18. 47	33. 50		***					
	***	20. 15	·1150					
21. 3	33. 0	20. 30	·1144					
	***	20. 45	·1146					
23. 12	35. 0		***					
	***	21. 40	·1132					
23. 59	35. 20	22. 45	·1128					
		23. 39	·1126					
Jan. 23		Jan. 23		Jan. 23		Jan. 23		
0. 0	21. 35. 20	0. 0	·1126	0. 0	·02180	1. 0	44·3	45·2
0. 43	35. 30	1. 35	·1122	1. 43	[illegible]	3. 0	[illegible]	47·0
1. 2	36. 40	2. 45	·1124	3. 22	[illegible]	9. 0	[illegible]	[illegible]
4. 42	32. 45	3. 10	·1128	4. 25	·01760	22. 20	38·0	[illegible]
5. 58	32. 40	3. 34	·1127	5. 58	·01607			
	***	4. 45	·1130	6. 52	·01607			
11. 4	34. 30	5. 17	·1130	6. 58	[illegible]			
12. 40	33. 40	7. 15	·1134	11. 52:	[illegible]			
12. 51	35. 0	12. 17	·1144	16. 21	·02150			
13. 11	33. 55	12. 45	·1143	23. 59	·02052			
14. 47	34. 55	12. 59	·1148					
16. 13	34. 30		***					
18. 28	35. 30	15. 0	·1147					
19. 15	34. 10	18. 0	·1156					
19. 52	35. 0	20. 10:	·1164					
20. 53:	34. 15	22. 10	·1162					
22. 38	37. 20	23. 59	·1157:					
22. 51	35. 30							
23. 59	36. 40							
Jan. 24		Jan. 24		Jan. 24		Jan. 24		
0. 0	21. 36. 40	0. 0	·1157	0. 0	·02052	6. 40	[illegible]	[illegible]
0. 45	36. 0	1. 5	·1153	2. 0	·02054	21. 0	35·0	37·0
1. 51	36. 40	3. 45	·1158	10. 25:	[illegible]			
4. 30	33. 20	7. 10	·1160	18. 14	·02050 ·02024			
	***	7. 50	·1158					
8. 8	32. 50		***	19. 52	[illegible] [illegible]			
	***	10. 5	·1156					
14. 53	33. 40	11. 0	·1154	20. 45	[illegible]			
15. 15	37. 0		***	23. 0	[illegible]			
15. 55	32. 25	13. 0	·1157	23. 59	·01882			
16. 32	35. 25	13. 30	·1161					
17. 1	33. 35		***					
	***	14. 15	·1158					
18. 7	34. 30	14. 35	·1161					
	***	15. 20	·1158					
19. 48	31. 30	15. 44	·1164					
	***							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 24		Jan. 24						
h m	° ′ ″	h m		h m		h m	°	°
21. 27	21. 33. 30	16. 29	·1157					
21. 40	34. 45	17. 10	·1167					
	***		***					
22. 20	33. 30	19. 30	·1170					
22. 44	37. 25	21. 45	·1147					
23. 18	37. 25	22. 10	·1136					
	(†)	22. 35	·1130					
		23. 30	·1130					
			(†)					
Jan. 25		Jan. 25		Jan. 25		Jan. 25		
	(†)		(†)	0. 0	·01882	1. 0	39 ·4	41 ·0
0. 43	21. 36. 50	0. 40	·1128	2. 30	·01557	3. 0	43 ·3	44 ·0
1. 13	34. 55	1. 8	·1128	4. 10	·01638	9. 0	45 ·0	46 ·2
	***	1. 45	·1134	9. 48	·01584	21. 0	38 ·0	40 ·8
5. 11	30. 40		***	15. 0	·01738			
6. 0	30. 40	3. 5	·1128	20. 50	·02177			
6. 43	31. 45		***	21. 21	·02150			
	***	5. 10:	·1137	23. 59	·02168			
7. 38	31. 40		***					
8. 8	32. 55	7. 15	·1128					
8. 29	32. 15		***					
8. 43	33. 25	8. 0	·1129					
13. 24	32. 10	8. 16	·1136					
14. 10	33. 55	8. 30	·1134					
	***	9. 6	·1140					
19. 24	33. 30	10. 7	·1146					
	***	10. 20	·1144					
20. 56	32. 30	12. 0	·1130					
22. 3	33. 25	12. 30	·1149					
22. 23	35. 0	13. 7	·1154					
22. 52	34. 50	14. 7	·1152					
23. 59	34. 0	15. 5	·1153					
		15. 45	·1152					
		18. 15	·1160					
		20. 40:	·1162					
		23. 0	·1130					
		23. 59	·1130					
Jan. 26		Jan. 26		Jan. 26		Jan. 26		
0. 0	21. 34. 0	0. 0	·1130	0. 0	·02168	1. 0	40 ·2	41 ·6
2. 3	35. 30	1. 10	·1132	1. 30	·02117	3. 0	42 ·5	43 ·0
2. 22	34. 55	2. 30	·1127	4. 57	·01837	9. 0	42 ·0	43 ·0
2. 41	35. 0	2. 46	·1128	7. 11	·01717	21. 8	37 ·0	40 ·5
2. 53	34. 30	3. 2	·1126	8. 29	·01707			
4. 0	32. 45	4. 18	·1134	10. 12	·01738			
4. 11	33. 20	4. 35	·1130	14. 31	·01877			
4. 47	32. 30		***	15. 12	·01857			
5. 6	33. 30	5. 40	·1136	20. 12	·02144			
5. 35	33. 10	5. 50	·1134	23. 59	·02117			
5. 54	34. 0	8. 0	·1138					
7. 0	33. 0	8. 30	·1125					
7. 33	33. 20	9. 0	·1127					
8. 10	32. 40	9. 45	·1132					
8. 30	27. 30	10. 15	·1134					
9. 10	29. 35	10. 30	·1127					
9. 59	25. 50	10. 43	·1136					
10. 28	29. 30	10. 50	·1134					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 26		Jan. 26						
h m	° ′ ″	h m		h m		h m	°	°
10. 39	21. 27. 30	10. 59	·1139					
11. 27	32. 0	11. 7	·1136					
11. 59	31. 30	11. 22	·1144					
12. 27	31. 55	11. 43	·1138					
12. 45	31. 30	12. 7	·1144					
13. 4	37. 0	12. 35	·1144					
13. 52	26. 0	13. 14	·1148					
14. 11	28. 30	13. 25	·1146					
14. 39	28. 25	14. 0	·1166					
15. 10	34. 30	14. 45	·1151					
15. 39	33. 30	15. 15	·1151					
	***	15. 44	·1143					
18. 11	32. 0	16. 20	·1156					
	***		***					
19. 0	32. 55	18. 30	·1161					
20. 14	30. 55	19. 15:	·1170					
22. 30	35. 30	20. 45	·1152					
22. 52	34. 30	22. 35	·1142					
	(†)	23. 0	·1134					
			(†)					
Jan. 27		Jan. 27		Jan. 27		Jan. 27		
0. 0	21. 33. 50	0. 0	·1134	0. 0	·02117	1. 0	41 ·2	42 ·7
1. 30	33. 45		***	1. 40	·01916	3. 0	45 ·2	45 ·5
1. 40	35. 0	2. 6	·1122	3. 0	·01664	9. 0	47 ·3	47 ·6
2. 11	33. 55	2. 17	·1128	4. 15	·01730	21. 6	39 ·5	42 ·0
2. 30	35. 50		***	5. 40	{ ·01717 ·01822			
2. 54	35. 15	2. 53	·1122					
3. 10	35. 55	3. 2	·1126	7. 45	·01805			
3. 28	34. 0	3. 23	·1117	12. 24	·01984			
4. 9	32. 30	3. 34	·1120	15. 57	·02250			
5. 39	31. 10	3. 45	·1116	18. 40	·02220			
6. 28	31. 35	4. 46	·1128	22. 52	·02184			
6. 44	31. 10		***	23. 59	·02194			
7. 11	32. 5	7. 0	·1129					
9. 16	30. 30	7. 15	·1124					
9. 44	31. 45	8. 45	·1128					
14. 11	34. 50	11. 50	·1142					
14. 28	36. 0	14. 7	·1144					
15. 0	33. 20	14. 35	·1152					
15. 40	34. 30	15. 15	·1151					
16. 23	31. 0	16. 0	·1152					
17. 42	33. 45	16. 15	·1152					
18. 30	32. 55	16. 59	·1147					
20. 56	31. 55	17. 30	·1154					
	***		***					
22. 12	35. 0	20. 0	·1157					
22. 40	35. 0	20. 45	·1156					
23. 18	37. 30		***					
23. 59	36. 50	21. 30	·1142					
			***					
		23. 59	·1128					
Jan. 28		Jan. 28		Jan. 28		Jan. 28		
0. 0	21. 36. 50	0. 0	·1128	0. 0	·02194	1. 0	42 ·6	44 ·2
	***	0. 30	·1125	1. 30:	·02080	3. 0	46 ·4	47 ·0
1. 25	36. 20		***	3. 39	·01722	9. 0	49 ·5	49 ·5
1. 55	37. 0	2. 40	·1126	6. 43	·01732	21. 6	44 ·2	45 ·3

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 28		Jan. 28		Jan. 28				
h m	° ′ ″	h m		h m		h m	°	°
2. 57	21. 34. 30	2. 50	·1110	6. 50	·01811			
3. 12	35. 30	3. 10	·1111	7. 9	·01804			
3. 29	33. 55	3. 25	·1108	9. 30	·01906			
4. 32	33. 15	3. 45	·1114	12. 43	·01998			
4. 45	33. 25	4. 45	·1122	17. 14	·02290			
5. 52	31. 15	4. 55	·1121	22. 30	·02268			
6. 21	31. 55	5. 55	·1126	23. 59	·02216			
6. 56	31. 30	6. 30	·1122					
7. 46	32. 20	6. 55	·1125					
8. 52	31. 5		***					
9. 10	28. 10	8. 20	·1123					
9. 45	31. 0	9. 10	·1126					
10. 30	30. 40	9. 35	·1125					
10. 44	31. 30	10. 7	·1128					
11. 7	30. 0	10. 29	·1136					
12. 59	34. 30	10. 58	·1131					
13. 26	33. 30	11. 16	·1135					
	***		***					
14. 8	34. 25	13. 5	·1138					
	***	15. 0	·1142					
16. 44	33. 50	17. 35	·1150					
17. 23	32. 35	20. 0:	·1150					
21. 11	30. 10	22. 0:	·1132					
22. 59	34. 15		***					
23. 59	34. 10	23. 55	·1128					
Jan. 29		Jan. 29		Jan. 29		Jan. 29		
0. 0	21. 34. 10	0. 0	·1122	0. 0	·02216	1. 0	47·8	48·0
1. 40	34. 45		***	1. 59	·02017	3. 0	50·5	50·5
4. 40	32. 35	0. 45	·1115	3. 54	·01764	9. 0	52·0	52·0
8. 59	31. 5	1. 0	·1118	3. 58	·01789	21. 7	50·0	51·7
9. 15	29. 20	1. 29	·1118	9. 15	·01738			
9. 40	30. 40	1. 40	·1114	12. 42	·01747			
10. 40	30. 30	3. 15	·1109	19. 57	·01910			
10. 57	28. 30		***	22. 11	·01928			
11. 13	29. 0	5. 30	·1117	23. 59	·01893			
11. 18	28. 50	8. 30	·1122					
11. 30	30. 0	9. 52	·1121					
12. 8	29. 25	10. 2	·1124					
12. 38	31. 25	10. 15	·1121					
12. 45	31. 0	10. 45	·1122					
13. 10	32. 30	11. 0	·1125					
13. 28	31. 30	11. 40	·1122					
	***	11. 53	·1128					
14. 26	33. 0	12. 15	·1130					
14. 39	32. 30	12. 30	·1124					
18. 54	32. 40	13. 0	·1124					
21. 30	30. 55	13. 29	·1126					
22. 57	34. 25	13. 45	·1123					
23. 18	34. 30	15. 7	·1126					
23. 59	35. 30	16. 15	·1128					
		17. 0	·1132					
		20. 30:	·1131					
		22. 40	·1113					
		23. 0	·1113					
		23. 19	·1109					
		23. 59	·1108					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 30		Jan. 30		Jan. 30		Jan. 30		
h m	° ′ ″	h m		h m				
0. 0	21. 35. 30	0. 0	·1108	0. 0	·01803	1. 0	52·5	52·7
2. 14	37. 20	1. 0	·1108	2. 22	·01775 [illegible]	3. 0	54·[illegible]	53·[illegible]
4. 20	33. 45	1. 45	·1111	8. 45	·01808	9. 0	54·0	54·0
4. 56	33. 45	2. 45	·1108	15. 14	[illegible]	21. 0	[illegible]	[illegible]
5. 11	33. 20	3. 23	·1120	18. 40	·01866			
	***	4. 30	·1120	23. 59	·02304			
6. 52	33. 30	5. 40	·1118					
7. 28	33. 0	6. 20	·1120					
8. 43	32. 35	7. 30	·1119					
9. 20	25. 0	7. 44	·1122					
9. 46	27. 30	8. 0	·1119					
10. 16	27. 30	8. 30	·1118					
10. 42	30. 40	9. 5	·1113					
13. 3	33. 20	9. 35	·1118					
14. 49	33. 30	9. 47	·1114					
15. 15	33. 45		***					
15. 53	33. 35	13. 0	·1120					
16. 29	34. 25	16. 10	·1122					
17. 34	33. 25	17. 30	·1124					
18. 5	33. 45	19. 13	·1128					
21. 42	31. 55	22. 15	·1118					
23. 3	34. 5	23. 59	·1112					
23. 22	36. 0							
23. 59	36. 30							
Jan. 31		Jan. 31		Jan. 31		Jan. 31		
0. 0	21. 36. 30	0. 0	·1112	0. 0	·02304	7. 50	48·5	50·5
1. 9	37. 30	1. 10	·1117	1. 15	·02396	21. 0	42·2	43·5
1. 45	37. 10	1. 21	·1117	3. 15	·02408			
1. 51	37. 25	3. 30	·1120	7. 17	·02390			
3. 47	33. 45	6. 29	·1124	8. 52	·02410			
5. 34	32. 20	6. 40	·1121	12. 44	·02291			
7. 29	33. 30	7. 45	·1123	14. 30	·02270			
7. 54	31. 50	8. 13	·1122	14. 36	·02177			
8. 47	33. 25	9. 30	·1126	15. 40	·02230			
	***		***	19. 52	·02244			
16. 14	33. 55	13. 0	·1134	21. 43	·02210			
	***	16. 15	·1138	23. 59	·02236			
19. 49	33. 0	20. 25:	·1137					
	***		***					
21. 14:	31. 0	23. 59	·1124					
22. 46	34. 10							
23. 59	36. 0							
Feb. 1		Feb. 1		Feb. 1		Feb. 1		
0. 0	21. 36. 0	0. 0	·1123	0. 0	·02236	1. 0	43·0	44·0
0. 31	36. 5	0. 40	·1116	3. 40	·02132	3. 0	45·4	46·5
1. 31	37. 20	1. 0	·1122	5. 10	[illegible]	9. 0	44·6	45·0
3. 39	33. 15		***	7. 0	·01907	21. 5	[illegible]	40·2
5. 9	33. 30	2. 15	·1125	11. 0	·01884			
5. 30	32. 40	2. 30	·1123	15. 53	·02203 ·02176			
6. 8	34. 15	3. 20	·1124	22. 22	·02140 [illegible]			
6. 28	33. 45	4. 14	·1131	23. 59	·02038			
6. 59	35. 35	4. 36	·1132					
7. 39	35. 45	5. 45	·1134					
	***	7. 0	·1127					
8. 26	33. 45	7. 15	·1128					
9. 29	33. 0	7. 30	·1125					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 1		Feb. 1						
h m	° ′ ″	h m		h m		h m	°	°
9. 49	21. 33. 30	8. 20	·1129					
10. 12	32. 15		***					
10. 35	32. 30	10. 15	·1132					
11. 0	26. 5	10. 30	·1142					
13. 0	33. 30	11. 7	·1143					
	***	11. 30	·1131					
15. 34	34. 30		***					
16. 0	33. 30	12. 40	·1140					
	***	12. 45	·1138					
19. 13	31. 35		***					
19. 28	32. 50	15. 15	·1148					
19. 45	31. 50	15. 30	·1147					
20. 14	33. 30	16. 45	·1148					
	***		***					
21. 44	31. 40	18. 0	·1150					
22. 0	32. 35		***					
22. 37	32. 15	19. 45	·1158					
23. 51	36. 55		***					
23. 59	37. 20	21. 20	·1150					
		21. 45	·1149					
		22. 23	·1136					
		22. 45	·1138					
		23. 59	·1137					
Feb. 2		Feb. 2		Feb. 2		Feb. 2		
0. 0	21. 37. 25	0. 0	·1137	0. 0	·02038	1. 0	39·7	41·0
0. 24	39. 40	0. 30	·1138	1. 51	·02000	3. 0	42·0	42·3
0. 49	39. 15	0. 43	·1134	3. 21	·01886	9. 0	43·4	44·0
1. 9	41. 0	0. 50	·1143	3. 45	·01827	21. 0	41·0	42·8
1. 43	41. 5	1. 45	·1125	6. 12	·01586			
2. 9	43. 0	2. 6	·1108	6. 55	·01603			
2. 39	40. 45	2. 15	·1104	7. 14	·01630			
3. 27	40. 10		***	7. 42	·01593			
4. 10	33. 40	3. 25	·1124	7. 59	·01608			
4. 51	32. 30	3. 45	·1108	9. 11	·01597			
5. 40	32. 20	4. 30	·1122	10. 0	·01529			
6. 13	34. 30		***	10. 45	·01540			
6. 45	33. 10	5. 40	·1126	11. 18	·01497			
6. 57	34. 10		***	11. 30	·01509			
7. 30	16. 0	6. 17	·1117	11. 56	·01474			
7. 41	20. 0	6. 40	·1121	13. 0	·01525			
7. 52	17. 40	6. 58	·1120	17. 12	·01612			
8. 21	30. 5	7. 7	·1114	17. 29	·01617			
8. 45	26. 0	7. 15	·1118	23. 59	·01710			
8. 50	27. 0	7. 29	·1131					
9. 14	25. 30	7. 35	·1130					
9. 39	16. 30	7. 45	·1108					
10. 8	29. 0	8. 10	·1119					
10. 35	26. 30	8. 25	·1105					
10. 44	30. 0	8. 47	·1115					
10. 56	25. 30		***					
11. 15	30. 20	9. 7	·1112					
11. 27	28. 0	9. 42	·1158					
11. 45	32. 10	10. 0	·1128					
12. 4	27. 50	10. 8	·1118					
12. 37	30. 40	10. 50	·1128					
12. 52	29. 30	11. 0	·1147					
13. 45:	34. 0	11. 24	·1131					
14. 34	32. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 2		Feb. 2						
h m	° ′ ″	h m		h m		h m	°	°
14. 59	21. 34. 30	11. 43	·1150					
15. 13	35. 0		***					
15. 35	34. 10	12. 6	·1134					
16. 4	35. 10	12. 25	·1141					
16. 35	34. 35	12. 53	·1132					
17. 6	34. 20		***					
17. 27	34. 45	14. 10	·1133					
17. 59	32. 5		***					
	***	15. 25	·1141					
18. 35	33. 20		***					
19. 12	35. 30	16. 1	·1138					
19. 24	33. 50	16. 30	·1144					
	***	16. 58	·1140					
19. 58	34. 5	17. 31	·1153					
20. 28	33. 10	18. 0	·1152					
	***		***					
21. 22	35. 0	18. 30	·1157					
21. 42	38. 40	19. 0	·1150					
22. 16	41. 50		***					
	***	20. 10	·1148					
23. 12	37. 15		***					
23. 33	42. 30	21. 10	·1138					
23. 45	40. 30		***					
23. 59	41. 30	22. 0	·1114					
			***					
		23. 59	·1108					
Feb. 3		Feb. 3		Feb. 3		Feb. 3		
0. 0	21. 41. 30	0. 0	·1108	0. 0	·01710	1. 0	44·2	44·5
0. 9	43. 15	0. 14	·1096	1. 7	{ ·01676	3. 0	46·6	46·3
0. 17	41. 10		***		·01840	9. 0	49·5	49·0
1. 0	41. 0	1. 0	·1106	2. 43	·01737	21. 6	49·2	50·3
1. 7	39. 45	1. 30	·1090	5. 22	·01758			
1. 27	41. 0	2. 0	·1105	11. 11	·01722			
1. 35	37. 55		***	11. 40	·01700			
2. 25	41. 20	2. 30	·1102	13. 45	·01720			
2. 45	38. 20	3. 5	·1108	14. 29	·01694			
2. 56	38. 45	3. 16	·1103	22. 11	·01737			
3. 5	38. 0	3. 40	·1106	23. 59	·01833			
3. 12	38. 30		***					
3. 39	36. 10	4. 15	·1100					
3. 45	36. 40	4. 40	·1106					
3. 59	35. 30	4. 45	·1102					
4. 10	34. 45		***					
4. 15	35. 30	5. 24	·1102					
4. 33	33. 30		***					
4. 45	33. 55	6. 7	·1118					
5. 13	30. 50	6. 15	·1114					
5. 27	32. 30	6. 40	·1118					
5. 38	31. 50	7. 14	·1112					
5. 47	32. 45	7. 25	·1120					
6. 13	32. 50		***					
6. 26	33. 50	8. 10	·1121					
6. 30	32. 30		***					
6. 44	32. 5	9. 6	·1132					
7. 0	32. 55	9. 27	·1132					
7. 40	29. 0	9. 40	·1120					
7. 58	30. 30		***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
Feb. 3	
h m	° ′ ″
8. 9	21. 30. 5 ***
8. 53	31. 30
9. 40	26. 0
10. 8	27. 25
10. 15	28. 40
10. 47	30. 0
11. 6	17. 5
11. 23	22. 25
11. 30	24. 35
11. 41	22. 35
11. 51	25. 55
12. 15	27. 5
12. 44	31. 55 ***
13. 14	32. 35
13. 22	32. 0
13. 56	40. 15
14. 21	36. 0
15. 24	33. 10
15. 52	29. 30
16. 45	34. 30
17. 10	32. 55 ***
17. 43	34. 20
17. 51	33. 30 ***
18. 22	36. 5 ***
19. 15	35. 5
19. 37	36. 30
20. 8	33. 45 ***
21. 15	32. 55 ***
21. 59	35. 15 ***
22. 27	34. 55
22. 50	37. 5 ***
23. 45	36. 30
23. 59	38. 50

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Feb. 3	
h m	
10. 20	·1118
10. 40	·1123
11. 1	·1158
11. 31	·1134
11. 40	·1136
11. 58	·1124
12. 14	·1118
12. 23	·1126
12. 35	·1120 ***
13. 19	·1124
13. 56	·1134
14. 30	·1126 ***
16. 0	·1134
16. 15	·1126 ***
16. 50	·1125 ***
19. 0	·1134
19. 29	·1142 ***
20. 30	·1117
20. 45	·1122 ***
22. 10	·1106 ***
22. 39	·1107 ***
23. 59	·1092

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°

Greenwich Mean Solar Time.	Western Declination.
Feb. 4	
0. 0	21. 38. 55
0. 14	38. 10 ***
0. 50	39. 15
1. 7	43. 40
1. 15	39. 30
1. 52	36. 40
1. 56	37. 25
2. 9	36. 50
2. 16	38. 0 ***
2. 39:	38. 40
3. 8	40. 30
3. 16	38. 50

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Feb. 4	
0. 0	·1092
0. 7	·1093
0. 20	·1089 ***
1. 8	·1098
2. 10	·1094
2. 43	·1099
2. 54	·1094
3. 10	·1098
3. 23	·1089
3. 51	·1093
4. 0	·1089
4. 13	·1089
4. 40	·1090 ***

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Feb. 4	
0. 0	·01833
3. 15	·01892
4. 7	·01877
4. 44	·01895
6. 21	·01840
7. 16	·01843
10. 0	·01937
13. 43	·02157
17. 7	·02411
22. 25	·02336
23. 59	·02338

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 4		
1. 0	52 ·6	53 ·0
3. 0	54 ·3	55 ·0
9. 0	52 ·7	52 ·5
21. 0	46 ·0	46 ·8

Greenwich Mean Solar Time.	Western Declination.
Feb. 4	
h m	° ′ ″
3. 40	21. 38. 0
3. 54	36. 0
4. 10	34. 15
4. 19	34. 5
4. 39	32. 30
4. 58	34. 30
5. 29	34. 15
5. 42	33. 10
6. 0	34. 15
6. 26	25. 30
6. 41	27. 30
6. 48	26. 55
7. 0	30. 10
7. 16	30. 50
7. 41	32. 45
7. 58	32. 25
8. 43	34. 10
9. 27	21. 30
9. 56	29. 25
10. 7	28. 20
10. 18	31. 45
10. 34	31. 25
10. 58	32. 50
11. 13	32. 0
11. 54	32. 20
12. 39	35. 15
13. 11	33. 40
13. 31	34. 30
14. 14	32. 0
14. 51	34. 25
17. 24	33. 25
18. 56	35. 35
19. 15	33. 30
19. 30	33. 30
20. 4	31. 30 ***
20. 45	33. 45
21. 53	31. 40 (†)

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Feb. 4	
h m	
5. 42	·1112
5. 51	·1108
6. 14	·1104
6. 30	·1120 ***
6. 58	·1128
7. 37	·1114
7. 45	·1115
8. 7	·1108 ***
9. 10	·1114
9. 40	·1144
10. 8	·1127
10. 15	·1127
10. 30	·1124
10. 55	·1114
11. 11	·1116 ***
12. 0	·1116
12. 30	·1118
13. 2	·1128
14. 0	·1122
14. 44	·1126
15. 14	·1121
15. 40	·1125
16. 45	·1127 ***
18. 20	·1130 ***
19. 44	·1120
20. 0	·1126
21. 20	·1130
22. 15	·1114
23. 59	·1098

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m		

Greenwich Mean Solar Time.	Western Declination.
Feb. 5	
0. 0	21. 34. 50 ***
1. 10	37. 15
1. 17	36. 30
2. 7	37. 0
4. 56	33. 25
5. 18	33. 25
6. 30	32. 10
7. 6	33. 0
7. 31	30. 0
8. 5	31. 15
8. 38	24. 0
9. 57	32. 50 ***
11. 58	32. 40
12. 22	36. 55
12. 44	33. 45

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Feb. 5	
0. 0	·1098 ***
2. 25	·1098
3. 30	·1100
5. 5	·1108 ***
7. 45	·1108
8. 29	·1116
8. 41	·1127
9. 0	·1125
9. 15	·1110
9. 30	·1115
10. 2	·1108
10. 16	·1114
10. 30	·1108
11. 23	·1113
11. 44	·1110 ***

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Feb. 5	
0. 0	·02338
1. 0	·02258
2. 54	{ ·01967 ·02180
4. 18	·01950
8. 32	·01867
14. 0	·02047
18. 24	·02436
20. 29	·02405
23. 59	·02393

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 5		
1. 0	49 ·5	49 ·5
3. 0	53 ·2	52 ·4
9. 0	54 ·3	54 ·0
21. 0	47 ·9	47 ·6

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 5		Feb. 5						
h m	° ′ ″	h m		h m		h m	°	°
13. 22	21. 36. 15	12. 40	·1112					
13. 44	33. 45	13. 0	·1116					
15. 28	34. 30	13. 15	·1114					
17. 27	32. 55	13. 50:	·1120					
18. 8	33. 30	14. 30	·1116					
19. 54	33. 0	17. 0:	·1126					
20. 21	33. 30	18. 28	·1126					
20. 40	32. 30	19. 45:	·1130					
21. 19	32. 0		***					
22. 0	33. 0	23. 15	·1104					
22. 13	32. 10		***					
22. 18	33. 40	23. 59	·1095					
	***							
22. 52	34. 40							
23. 1	36. 10							
23. 29	36. 15							
23. 59	36. 55							
Feb. 6		Feb. 6		Feb. 6		Feb. 6		
0. 0	21. 36. 55	0. 0	·1095	0. 0	·02393	1. 0	50 ·0	49 ·0
0. 15	37. 50	0. 45	·1090	1. 15	·02404	3. 0	52 ·0	51 ·0
1. 12	37. 15	1. 8	·1084	3. 15	·02230	9. 0	52 ·5	52 ·5
1. 42	38. 35	1. 45	·1090	5. 54	·01846	22. 35	41 ·0	42 ·0
2. 25	37. 30	2. 30	·1088	6. 45	{ ·01850 ·02020			
2. 44	37. 40		***					
3. 14	36. 15	3. 43	·1097	11. 15	·02067			
6. 11	31. 55	4. 45	·1100	15. 0	·02379			
7. 11	33. 30		***	17. 40	·02320			
7. 21	32. 30	7. 0	·1103	23. 59	·02258			
7. 42	32. 40	7. 20	·1096					
8. 9	30. 10	7. 40	·1095					
8. 43	34. 0		***					
	***	8. 5	·1088					
10. 18	31. 55	8. 40	·1096					
	***		***					
11. 6	34. 0	10. 15	·1108					
	***	10. 35	·1120					
12. 17	33. 30	10. 59	·1112					
	***	11. 12	·1118					
13. 39	34. 20	11. 29	·1112					
	***	12. 5	·1115					
14. 22	33. 35		***					
	***	13. 0	·1115					
16. 0	35. 0		***					
	***	16. 40	·1126					
17. 22	32. 40	17. 20	·1132					
17. 58	33. 50		***					
	***	17. 53	·1127					
20. 23	33. 40	18. 40	·1126					
21. 11	36. 15		***					
21. 30	33. 45	19. 30	·1132					
21. 42	34. 40		***					
21. 54	33. 30	20. 20	·1126					
	***	21. 16	·1110					
23. 0	36. 40		***					
23. 24	35. 30	22. 14	·1124					
23. 59	38. 35	22. 40	·1117					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Feb. 6						
h m	° ′ ″	h m		h m		h m	°	°
		23. 38	·1108					
		23. 59	·1116					
Feb. 7		Feb. 7		Feb. 7		Feb. 7		
0. 0	21. 38. 35	0. 2	·1117	0. 0	·02258	6. 45	44 ·8	46 ·2
0. 36	37. 20	0. 30	·1114	2. 40	·02256	21. 0	38 ·4	41 ·
0. 52	37. 30		***	9. 41:	·01900			
1. 13	39. 0	3. 0	·1115	17. 0	{ ·02247 ·02211			
2. 28	37. 15	4. 15	·1120					
	***	4. 40	·1117	20. 43	·02193			
2. 48	37. 30	6. 20	·1120	20. 52	·02128			
3. 26	35. 20	7. 25	·1120	21. 37	·02175			
6. 30	32. 45		***	23. 59	·02150			
7. 31	33. 0	8. 40	·1124					
8. 16	33. 50	9. 5	·1122					
9. 44	33. 10	9. 40	·1123					
10. 30	23. 40	10. 17	·1116					
11. 15	32. 10	10. 45	·1116					
11. 52	33. 40	11. 0	·1122					
12. 42	34. 30	11. 10	·1116					
13. 0	33. 45		***					
14. 22	33. 45	13. 0	·1127					
14. 44	37. 30		***					
15. 56	32. 15	15. 0	·1128					
16. 29	33. 30	16. 9	·1135					
17. 22	33. 0	16. 40	·1132					
19. 44	33. 20	19. 45:	·1136					
20. 13	32. 0	22. 15	·1113					
22. 48	36. 15	22. 45	·1112					
	(†)		(†)					
Feb. 8		Feb. 8		Feb. 8		Feb. 8		
0. 0	21. 37. 10		(†)	0. 0	·02150	1. 0	42 ·0	42 ·0
0. 39	37. 20	0. 15	·1112	2. 39	·02030	3. 0	46 ·0	46 ·7
0. 51	37. 55		***	4. 17	·01698	9. 0	47 ·0	47 ·5
1. 12	37. 0	1. 42	·1108	5. 15	·01733	21. 0	38 ·2	42 ·2
	***	2. 0	·1104	9. 13	·01673			
4. 59	33. 0		***	10. 17	·01677			
5. 16	31. 40	3. 45	·1100	14. 13:	·01843			
5. 37	31. 50	4. 0	·1104	18. 55	·02237			
5. 58	30. 45	4. 15	·1102	19. 15	·02218			
6. 52	33. 0	4. 33	·1104	23. 59	·02212			
7. 22	33. 30	5. 0	·1103					
7. 42	32. 30	5. 15	·1099					
8. 22	32. 30	6. 0	·1106					
9. 3	17. 45	6. 35	·1101					
9. 20	26. 50		***					
10. 13	31. 55	7. 15	·1107					
10. 42	30. 55		***					
	***	7. 40	·1102					
15. 23	35. 0	8. 0	·1104					
	***	8. 29	·1100					
18. 40	33. 25	8. 44	·1086					
21. 7	31. 0	9. 9	·1129					
23. 8	34. 30	9. 53	·1102					
23. 22	33. 50	10. 10	·1106					
23. 59	34. 10		***					
		11. 47	·1116					
			***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Feb. 8						
h m	° ′ ″	h m		h m		h m	°	
		13. 30	·1124					
			***					
		14. 10	·1124					
		14. 45	·1126					
		17. 0	·1126					
		18. 0	·1130					
		20. 15	·1130					
		21. 35	·1120					
			***					
		23. 59	·1106					
Feb. 9		Feb. 9		Feb. 9		Feb. 9		
0. 0	21. 34. 10	0. 0	·1106	0. 0	·02212	1. 0	41·3	42·2
0. 22	35. 40	1. 55	·1104	2. 0:	·02100	3. 0	45·0	44·3
0. 44	35. 0		***	5. 18	·01652	9. 0	45·0	45·2
1. 57	35. 45	3. 15	·1106	7. 24	·01656	21. 0	38·3	41·4
2. 38	37. 20	4. 55	·1111	10. 13	·01658			
3. 54	34. 20		***	13. 45	·01757			
4. 59	33. 15	5. 50	·1106	20. 26	·02216			
5. 44	28. 40	6. 14	·1113	22. 11	·02175			
6. 0	30. 5	7. 37	·1098	23. 59	·02196			
6. 15	30. 5	8. 25	·1102					
6. 28	31. 50	8. 40	·1111					
6. 45	31. 15	9. 0	·1102					
7. 0	33. 5	9. 15	·1106					
7. 32	31. 50	9. 33	·1113					
7. 46	32. 0		***					
8. 37	31. 5	11. 8	·1115					
9. 0	31. 40	11. 37	·1107					
9. 26	30. 5	12. 15	·1122					
9. 45	31. 35	12. 30	·1114					
10. 6	30. 15	12. 40	·1117					
10. 58	30. 50	13. 0	·1116					
11. 15	33. 0	13. 15	·1120					
11. 45	31. 0	13. 30	·1119					
11. 49	31. 40	14. 0	·1122					
12. 10	30. 50	15. 15	·1119					
12. 46	31. 30	16. 0	·1121					
13. 17	30. 45		***					
13. 30	32. 30	19. 45:	·1133					
13. 53	33. 10		***					
14. 12	32. 0	22. 15	·1111					
14. 51	31. 10		(†)					
15. 23	33. 45							
16. 22	34. 15							
16. 51	33. 20							
	***							
19. 12	33. 25							
20. 30	32. 0							
21. 44	35. 30							
22. 10	35. 20							
	(†)							
23. 39	37. 25							
23. 59	36. 50							
Feb. 10		Feb. 10		Feb. 10		Feb. 10		
0. 0	21. 36. 50	0. 0	·1101	0. 0	·02196	1. 0	42·4	43·0
0. 25	36. 20		***	1. 58:	·02014	3. 0	43·0	45·5

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 10		Feb. 10		Feb. 10		Feb. 10		
h m	° ′ ″	h m		h m		h m		
0. 36	21. 36. 50	1. 25	·1101	3. 52	·01686	9. 0	46·5	45·5
1. 0	36. 40	1. 34	·1097	5. 15	·016[illegible] ·01827	21. 6	40·0	42·0
1. 28	37. 45		***					
4. 21	31. 50	3. 15	·1104	9. 11	·01875			
4. 39	31. 45		***	10. 42	·01892			
5. 12	29. 15	4. 5	·1104	14. 28	·02013			
5. 22	29. 10	4. 27	·1106	18. 50	·02246			
5. 36	28. 30	4. 50	·1096	21. 30	·02217			
5. 54	30. 30	5. 15	·1101	23. 59	·02228			
6. 8	30. 40	5. 40	·1106					
6. 40	32. 25	6. 15	·1101					
8. 10	31. 45	7. 8	·1107					
8. 39	27. 20	7. 40	·1107					
8. 48	27. 45	8. 0	·1108					
9. 4	27. 30	8. 20	·1103					
9. 22	30. 40	9. 5	·1112					
10. 0	31. 40	9. 53	·1112					
10. 12	30. 10	10. 10	·1126					
10. 45	30. 30		***					
11. 22	32. 30	11. 0	·1118					
13. 0	33. 30		***					
14. 42	33. 40	12. 5	·1117					
15. 0	36. 0		***					
15. 38	34. 0	15. 18	·1126					
15. 45	34. 15		***					
16. 15	33. 5	20. 10:	·1126					
16. 29	33. 30	21. 9	·1110					
16. 53	33. 15		***					
17. 11	32. 0	23. 59	·1102					
	***							
18. 55	32. 0							
20. 30:	30. 30							
	***							
22. 44	34. 45							
23. 0	35. 50							
23. 15	35. 35							
23. 59	37. 15							
Feb. 11		Feb. 11		Feb. 11		Feb. 11		
0. 0	21. 37. 15	0. 0	·1102	0. 0	·02228	1. 0	42·8	43·2
2. 12	38. 0	0. 5	·1103	2. 22:	·02160	3. 0	45·4	44·[illegible]
3. 52	33. 30	1. 0	·1097	5. 11	·01860 ·019[illegible]	9. 0	45·0	46·3
6. 23	32. 45	2. 0	·1100			21. 0	42·3	44·0
7. 0	33. 30	2. 45	·1098	5. 50	·01891			
10. 0	33. 40		***	10. 3	·01918			
11. 13	31. 40	3. 47	·1098	20. 15	·02192			
12. 45	34. 0	4. 30	·1101	22. 41	·02246			
13. 12	33. 30	6. 45	·1102	23. 45	·02242			
13. 48	34. 20		***		(†)			
	***	10. 44	·1110					
18. 22	32. 30	10. 59	·1107					
20. 30	30. 50		***					
23. 59	35. 50	13. 55	·1112					
		18. 15:	·1120					
		23. 8	·1096					
		23. 59	·1104					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Feb. 12	
h m	° ′ ″
0. 0	21. 35. 50
0. 30	36. 15
1. 25	38. 20
3. 59	34. 15
7. 45	32. 55
8. 7	31. 50
8. 27	32. 30
9. 30	32. 45
9. 44	31. 55
10. 2	32. 30
10. 13	30. 50
10. 23	31. 0
11. 9	14. 30
11. 38	24. 35
12. 13	28. 0
12. 28	27. 50 ***
14. 0	33. 30 ***
14. 37	34. 10
14. 52	32. 50
15. 40	31. 50
16. 11	41. 30
17. 14	29. 45
17. 43	30. 0
18. 6	32. 30
18. 32	31. 30
18. 53	32. 45
19. 0	31. 50
19. 28	32. 30 ***
20. 43	31. 0
21. 47	32. 20
22. 13	36. 30 ***
22. 58	34. 20 ***
23. 44	37. 30
23. 59	36. 0
Feb. 13	
0. 0	21. 36. 0
1. 28	37. 50
1. 42	42. 20
2. 14	37. 55
2. 42	37. 20
2. 52	37. 45
3. 14	21. 36. 0
3. 21	36. 40
3. 40	36. 0
4. 45	37. 30
5. 0	39. 40
5. 59	35. 25
6. 32	36. 20 ***
8. 19	33. 50
8. 52	19. 50
9. 22	25. 50
9. 39	22. 0
9. 47	26. 10
9. 52	25. 50
10. 1	27. 5
10. 14	26. 50
10. 27	28. 30
10. 40	26. 15
11. 0	25. 30
11. 57	31. 30
12. 55	29. 0
13. 3	29. 50
13. 22	27. 20
13. 38	28. 30
13. 56	28. 0
14. 15	30. 25
14. 55	25. 50
15. 12	29. 10
15. 38	31. 0
15. 59	31. 10
16. 14	30. 0
16. 21	31. 30
16. 52	33. 20
17. 16	32. 30
17. 43	33. 0
18. 30:	36. 45
19. 14	33. 50
19. 39	34. 30
19. 57	32. 40
20. 15	34. 15 ***
21. 28	33. 0 ***
22. 0	34. 0 ***
22. 8	36. 0
22. 52	33. 30
23. 12	35. 30
23. 27	34. 45 ***
23. 59	36. 20
Feb. 14	
0. 0	21. 36. 20
0. 14	36. 0 ***
1. 19	39. 30
1. 33	38. 30 ***

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Feb. 12	
h m	
0. 0	·1104 ***
0. 45	·1107 ***
3. 0	·1104
4. 0	·1105 ***
6. 40	·1110 ***
7. 7	·1104
7. 30	·1108
7. 41	·1105
7. 50	·1107
8. 0	·1103
8. 30	·1104
8. 40	·1100
8. 53	·1106
8. 59	·1103
9. 2	·1106
9. 20	·1104 ***
10. 10	·1106 ***
10. 50	·1096
11. 0	·1098
11. 10	·1094
11. 27	·1102
11. 40	·1095
12. 5	·1092
12. 25	·1102
12. 55	·1107 ***
14. 40	·1112 ***
16. 10	·1113
16. 45	·1128
17. 30	·1116
18. 10	·1122
18. 47	·1116
19. 20	·1119
19. 25	·1116 ***
20. 10	·1122
20. 55	·1112
21. 15	·1107
22. 0	·1111
22. 30	·1096 ***
23. 40	·1094
23. 59	·1094
Feb. 13	
0. 0	·1094
0. 39	·1104 ***
1. 9	·1100
1. 40	·1108
2. 10	·1096 ***
3. 25	·1112
3. 45	·1112 ***
4. 15	·1119
4. 35	·1117
5. 10	·1096
5. 17	·1096 ***
6. 22	·1111
6. 40	·1106
7. 0	·1110
7. 30	·1108
7. 59	·1111 ***
8. 31	·1104
8. 49	·1117
9. 5	·1123
9. 25	·1094
9. 40	·1112
9. 52	·1098
10. 7	·1089
10. 29	·1101
10. 39	·1099
11. 25	·1102
11. 35	·1099
12. 6	·1106
12. 17	·1104
12. 44	·1106
13. 0	·1102
13. 15	·1104
13. 30	·1096
13. 47	·1096
14. 0	·1110
14. 17	·1113
14. 29	·1108
15. 2	·1113
15. 28	·1106
16. 10	·1110
16. 25	·1106
16. 30	·1110 ***
17. 22	·1110
17. 39	·1114 ***
18. 25	·1114
19. 15	·1126 ***
21. 45	·1102
22. 0	·1106 ***
23. 59	·1099
Feb. 14	
0. 0	·1099
0. 42	·1106
0. 55	·1103 ***
1. 30	·1106

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Feb. 12	
h m	
	(†)
0. 11	·02227
2. 0	·02039
4. 0	·01757
5. 30	·01773
5. 40	·01820
6. 0	·01803
10. 30	·01813
10. 51	·01790
17. 0	·01880
18. 0	·01940
23. 12	·02158
23. 59	·02208
Feb. 13	
0. 0	·02208
0. 29	·02177
0. 39	·02112
1. 40	·02040
3. 55	·01810
6. 0	·01779
7. 25	·01776
9. 0	·01842
10. 13	·01837
13. 22	·01892
14. 30	·01954
15. 39	·01975
23. 59	·02226
Feb. 14	
0. 0	·02226
2. 40	·02327
4. 39	·02354
11. 40	·02360
11. 52	·02350

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 12		
h m	°	°
1. 0	46·5	47·0
3. 0	46·0	47·0
9. 0	50·5	51·0
21. 0	47·0	47·4
Feb. 13		
1. 0	50·0	50·0
3. 0	52·2	52·0
9. 0	50·8	51·4
22. 26	47·2	47·7
Feb. 14		
6. 24	45·4	46·0
21. 0	41·2	43·

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Greenwich Mean Solar Time.	Western Declination.
Feb. 14	
h m	° ' "
2. 52	21. 37. 40
3. 17	36. 15
3. 28	36. 55
4. 17	33. 40
5. 4	33. 10
5. 52	35. 0
8. 28	32. 20
8. 48	25. 10
9. 26	31. 50
10. 0	21. 10
10. 40	31. 30
11. 7	31. 40
11. 14	33. 50
11. 30	32. 15
11. 38	33. 0
11. 55	30. 0
12. 15	31. 30
12. 51	29. 45
13. 7	32. 30
13. 47	25. 0
14. 7	24. 50
14. 30	20. 15
15. 0	28. 30
15. 20	29. 15
15. 28	28. 0
15. 56	27. 50
16. 14	31. 0
16. 25	30. 10
16. 59	34. 30
	***
18. 20	34. 40
18. 29	32. 30
18. 45	34. 10
	***
19. 20	34. 20
19. 41	32. 40
19. 55	34. 30
20. 43	34. 30
20. 55	37. 5
21. 30	34. 55
21. 52	35. 30
22. 44	33. 55
23. 59	35. 30
Feb. 15	
0. 0	21. 35. 30
0. 28	36. 20

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Feb. 14	
h m	
1. 52	·1113
	***
3. 15	·1116
3. 32	·1124
	***
4. 40	·1112
5. 7	·1120
5. 52	·1122
6. 5	·1116
7. 45	·1124
7. 59	·1121
8. 15	·1125
8. 30	·1119
8. 55	·1122
9. 10	·1112
9. 26	·1121
9. 44	·1120
10. 7	·1112
10. 27	·1116
10. 50	·1108
11. 8	·1108
11. 40	·1126
12. 6	·1112
12. 21	·1118
12. 40	·1115
13. 5	·1117
13. 23	·1138
13. 45	·1127
13. 52	·1134
13. 55	·1128
14. 20	·1129
	***
15. 2	·1112
	***
16. 7	·1122
16. 40	·1118
16. 52	·1124
17. 10	·1126
17. 25	·1118
18. 7	·1128
18. 16	·1126
	***
19. 5	·1134
	***
19. 25	·1128
	***
20. 0	·1130
20. 45	·1116
21. 17	·1121
	***
21. 55	·1112
	***
23. 10	·1104
23. 40	·1107
23. 59	·1106
Feb. 15	
0. 0	·1106
0. 15	·1107

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Feb. 14	
h m	
13. 27	·02347
14. 52	02258
15. 22	·02291
17. 19	·02294
23. 59	·02197
Feb. 15	
0. 0	·02197
1. 0	·02112

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Feb. 15		
1. 0	45·2	45·3
3. 0	49·0	50·6

Greenwich Mean Solar Time.	Western Declination.
Feb. 15	
h m	° ' "
0. 39	21. 37. 30
0. 56	37. 15
1. 15	38. 30
1. 43	37. 50
1. 58	38. 30
2. 20	37. 50
2. 38	39. 30
2. 56	38. 25
3. 16	38. 40
3. 30	40. 20
3. 44	38. 45
4. 0	40. 20
4. 11	39. 30
4. 20	40. 30
4. 45	37. 20
5. 7	40. 0
5. 42	39. 30
6. 0	36. 15
6. 20	37. 25
6. 29	36. 40
6. 32	36. 40
6. 45	30. 40
6. 49	30. 50
7. 12	21. 0
7. 20	24. 0
7. 28	21. 55
7. 36	28. 30
7. 43	27. 5
8. 2	35. 0
8. 17	30. 45
8. 40	32. 25
8. 51	32. 30
9. 13	35. 5
9. 28	27. 45
9. 57	31. 55
10. 7	30. 0
10. 31	36. 5
10. 43	31. 25
10. 49	33. 0
11. 14	32. 30
11. 37	28. 25
12. 14	32. 0
13. 14	28. 30
13. 31	31. 40
14. 19	25. 30
14. 39	33. 30
15. 11	26. 25
15. 51	32. 55
16. 57	29. 5
17. 41	31. 30
18. 11	29. 30
18. 41	33. 0
19. 43	31. 0
19. 52	32. 45
20. 11	32. 0
20. 19	33. 45
	***
21. 8	33. 40

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Feb. 15	
h m	
0. 30	·1102
1. 15	·1101
2. 24	·1104
2. 44	·1094
3. 15	·1094
3. 32	[illegible]
3. 45	·1092
4. 15	·1063
4. 31	·1071
4. 55	·1087
	***
5. 30	·1078
5. 45	·1078
6. 8	·1090
	***
6. 37	·1080
6. 40	·1006
	***
7. 6	·1101
7. 13	·1091
7. 25	·1101
7. 30	·1088
7. 40	·1092
7. 55	·1086
8. 7	·1073
8. 23	·1078
8. 45	·1076
8. 57	·1088
9. 25	·1080
9. 33	·1090
9. 54	·1088
10. 10	·1106
10. 27	·1117
10. 43	·1104
10. 47	·1108
11. 0	·1094
11. 15	·1074
12. 0	·1099
12. 15	·1094
12. 44	·1099
13. 10	·1100
13. 39	·1098
13. 54	·1105
14. 25	·1108
14. 40	·1124
14. 45	·1116
14. 48	·1118
15. 0	·1113
15. 17	·1117
15. 40	·1108
	***
16. 20	·1106
16. 42	·1111
	***
17. 40	·1116
17. 50	·1116
18. 25	·1107
	***

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Feb. 15	
h m	
3. 56	·01774
4. 52	·01850
5. 45	·01830
6. 40	[illegible]
	***
8. 10	[illegible]
9. 0	·01780 ·02000
10. 45	[illegible]
11. 26	·01913
12. 0	[illegible]
13. 42	·02050
14. 14	·02063
14. 44	·02112
15. 7	·02053
17. 30	·02253
20. 0	·02303
21. 30	·02290
23. 59	·02330

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 15		
h m	°	°
9. 0	[illegible]	49·7
21. 0	[illegible]	[illegible]

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Feb. 15	
h m	° ′ ″
22. 7	21. 36. 10
22. 22	35. 55
22. 39	37. 0
23. 0	36. 10
23. 38	37. 30
23. 59	37. 55
Feb. 16	
0. 0	21. 37. 55
0. 9	39. 30
1. 0	41. 10
2. 28	39. 30
2. 50	33. 15
2. 57	35. 0
3. 4	32. 55
3. 14	31. 20
3. 31	32. 20
3. 45	35. 15
3. 58	33. 30
4. 26	37. 0
	***
5. 12	37. 40
5. 36	33. 0
5. 43	34. 0
6. 2	34. 25
6. 13	33. 30
6. 22	33. 50
6. 30	32. 20
6. 41	32. 40
6. 46	30. 0
6. 57	43. 30
7. 15	28. 0
7. 19	37. 0
7. 52	15. 25
8. 12	17. 40
8. 36	30. 40
	***
9. 18	30. 0
9. 39	41. 50
9. 45	33. 50
9. 52	34. 45
10. 4	29. 10
10. 10	31. 30
10. 20	27. 25
10. 27	28. 30
10. 31	28. 25
11. 6	33. 10
11. 16	29. 55
11. 31	33. 0
11. 47	28. 30
12. 4	30. 0
12. 17	25. 10
12. 31	37. 40
12. 56	27. 35
13. 27	14. 20
Feb. 16	
h m	° ′ ″
13. 40	21. 20. 35
13. 47	20. 0
14. 16	30. 30
14. 37	41. 0
15. 16	28. 40
15. 45	35. 30
	***
16. 15	31. 30
	***
16. 41	36. 10
	***
17. 11	34. 30
17. 27	37. 40
17. 43	35. 30
	***
18. 27	37. 45
	***
19. 0	36. 0
	***
19. 13	33. 35
	***
19. 42	32. 50
	***
19. 58	35. 30
20. 19	33. 0
	***
20. 39	36. 45
21. 0	32. 55
	***
21. 41	40. 50
	***
22. 47	36. 0
	***
23. 18	41. 10
23. 59	38. 25
Feb. 17	
0. 0	21. 38. 25
0. 10	37. 50
0. 24	40. 25
0. 41	40. 10
	***
1. 52	42. 20
2. 6	44. 20
2. 21	41. 0
2. 30	42. 30
3. 0	36. 0
	***
3. 52	35. 0
4. 30	32. 25
4. 52	33. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Feb. 15	
h m	
19. 47	·1104
20. 2	·1109
	***
21. 25	·1096
21. 50	·1097
	***
22. 40	·1088
	***
23. 59	·1090
Feb. 16	
0. 0	·1090
	***
0. 39	·1093
1. 15	·1083
	(†)
2. 30	·1084
2. 47	·1097
3. 1	·1088
3. 8	·1094
	***
3. 30	·1080
3. 40	·1084
3. 51	·1075
4. 0	·1084
4. 8	·1082
4. 25	·1079
4. 37	·1086
4. 45	·1092
4. 52	·1092
4. 55	·1087
5. 5	·1088
	***
5. 23	·1077
5. 40	·1087
6. 0	·1090
6. 15	·1088
6. 25	·1078
6. 40	·1078
6. 45	·1128
6. 55	·1094
7. 3	·1083
7. 10	·1112
7. 30	·1056
7. 55	·1094
8. 7	·1092
8. 15	·1097
8. 40	·1076
9. 0	·1076
9. 20	·1102
9. 38	·1080
9. 43	·1084
9. 47	·1078
10. 0	·1094
10. 10	·1081
	***
10. 40	·1094
	***
Feb. 16	
h m	
11. 15	·1096
	***
11. 55	·1102
12. 7	·1110
12. 20	·1104
12. 35	·1088
12. 52	·1054
13. 14	·1085
13. 25	·1079
13. 43	·1110
13. 59	·1094
14. 15	·1104
14. 20	·1100
14. 35	·1103
14. 45	·1114
14. 54	·1109
15. 3	·1113
15. 10	·1109
15. 27	·1112
15. 59	·1077
16. 30	·1099
16. 44	·1096
17. 7	·1082
17. 45	·1092
	***
18. 29	·1112
18. 45	·1108
18. 59	·1116
19. 15	·1102
19. 40	·1106
19. 52	·1104
20. 10	·1113
20. 25	·1100
20. 35	·1104
	***
20. 59	·1088
21. 16	·1083
21. 31	·1091
21. 53	·1079
22. 30	·1080
22. 55	·1074
23. 59	·1074
Feb. 17	
0. 0	·1074
	***
0. 25	·1080
0. 45	·1071
1. 7	·1074
1. 43	·1068
1. 53	·1072
	***
2. 16	·1049
2. 30	·1056
2. 43	·1050
3. 25	·1080
	***
4. 0	·1075

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Feb. 16	
0. 0	·02330
0. 39	·02316
2. 40	·02180
4. 32	·01877
5. 40	{ ·01876 ·01972
6. 17	·01937
6. 51	·01995
7. 0	·01938
	***
7. 31	·01898
8. 0	·01933
9. 25	·01937
9. 52	·01900
10. 45	·01947
11. 40	·01960
12. 10	·01987
12. 53	·01928
13. 21	·01824
	***
14. 30	·02037
15. 0	·02103
15. 30	·02081
15. 47	·02109
16. 22	·02193
16. 45	·02177
18. 4	·02175
20. 15	·02247
22. 26	·02249
23. 39	·02296
23. 59	·02293
h m	
Feb. 17	
0. 0	·02293
1. 25	·02212
3. 15	·01890
3. 30	·01913
6. 0	·01842
6. 26	·01860
6. 31	·01930
8. 22	·01944
12. 28	·02093
14. 22	·02208
16. 30	·02397
17. 43	·02353
20. 0	·02340
22. 15	·02290

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Feb. 16		
1. 0	46·2	46·8
3. 0	49·0	50·2
9. 0	50·0	49·6
21. 7	41·2	43·2
Feb. 17		
1. 0	46·0	46·3
3. 0	47·0	48·0
9. 0	52·5	53·0
21. 0	43·0	44·5

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 17		Feb. 17		Feb. 17				
h m	° ′ ″	h m		h m		h m	°	
5. 45	21. 32. 20	4. 52	·1088	23. 59	·02322			
6. 15	11. 40	5. 14	·1082					
6. 29	17. 20	5. 35	·1087					
6. 35	18. 45	5. 45	·1085					
6. 43	15. 30	6. 5	·1061					
7. 9	23. 55	6. 20	·1097					
7. 14	23. 45	6. 28	·1092					
7. 29	25. 30	6. 35	·1083					
7. 39	28. 45	6. 54	·1104					
7. 52	20. 30	7. 10	·1092					
8. 12	29. 0	7. 20	·1093					
8. 24	26. 10	7. 40	·1081					
8. 30	26. 15	7. 56	·1105					
8. 45	23. 45	8. 20	·1088					
9. 7	25. 50		***					
9. 28	23. 30	8. 45	·1096					
10. 1	31. 15	9. 18	·1076					
10. 12	31. 0		***					
10. 27	33. 40	10. 25	·1094					
10. 59	32. 15	10. 55	·1088					
11. 47	36. 0	11. 55	·1096					
12. 12	34. 20	12. 25	·1095					
12. 57	33. 30	12. 50	·1098					
13. 28	37. 55		***					
14. 8	34. 30	13. 45	·1092					
	***	15. 15	·1100					
15. 6	34. 25	15. 30	·1099					
15. 53	32. 30	16. 10	·1106					
16. 15	32. 20	16. 31	·1101					
16. 30	36. 0	16. 50	·1096					
17. 29	34. 0	17. 13	·1104					
	***	17. 35	·1100					
18. 30	35. 10	18. 55	·1110					
18. 52	33. 30		***					
	***	19. 40	·1100					
20. 0	34. 45	20. 5	·1108					
20. 8	33. 30	20. 14	·1102					
20. 33	33. 50	20. 35	·1102					
20. 57	32. 10	21. 5	·1092					
21. 14	35. 0		***					
	***	22. 30	·1078					
21. 52	34. 30		***					
22. 28	39. 10	23. 59	·1062					
	***							
23. 48	39. 0							
23. 59	38. 30							
Feb. 18		Feb. 18		Feb. 18		Feb. 18		
0. 0	21. 38. 30	0. 0	·1062	0. 0	·02322	1. 0	46 ·2	45 ·7
0. 7	38. 0	0. 15	·1064	0. 21	·02327	3. 0	49 ·5	48 ·7
1. 2	39. 20	0. 20	·1067	1. 44	·02237	9. 0	47 ·5	47 ·5
1. 59	38. 10	0. 38	·1063	5. 11	{·01833 ·01904	21. 0	37 ·0	38 ·3
2. 12	38. 40	1. 0	·1073					
2. 47	37. 10		***	5. 30	·01906			
2. 54	37. 30	1. 30	·1072	8. 45	·02090			
3. 11	36. 0		***	11. 45	·02318			
3. 29	35. 45	2. 0	·1074	13. 18	·02247			
3. 53	30. 45	2. 30	·1080	20. 55	·02173			
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 18		Feb. 18		Feb. 18				
h m	° ′ ″	h m		h m				
4. 54	21. 30. 30	2. 38	·1078	23. 59	·02077			
5. 13	31. 50	2. 45	·1080					
5. 39	32. 10	3. 10	·1078					
6. 11:	33. 45	3. 20	·1084					
6. 53	26. 30	3. 45	·1078					
7. 12	30. 40		***					
7. 30	29. 15	5. 17	·1104					
8. 12	32. 50	5. 32	·1104					
9. 21	32. 30		***					
11. 15	32. 40	6. 52	·1098					
12. 12	31. 0	7. 5	·1123					
12. 45	30. 45	8. 5	·1110					
13. 9	33. 20	8. 30	·111[illegible]					
13. 48	30. 10	9. 20	·1116					
14. 44	33. 40	9. 45:	·1114					
15. 7	33. 20	12. 5	·1124					
15. 31	34. 0	12. 30	·1128					
	***	12. 42	·1124					
16. 58	32. 0	13. 13	·1134					
17. 29	31. 40	14. 12	·1126					
18. 12	33. 35	14. 32	·1128					
19. 9	32. 10	15. 0:	·1124					
19. 34	32. 30	16. 32	·1134					
21. 18	30. 30	17. 28	·1130					
21. 28	32. 0	19. 28	·1138					
22. 51	35. 15		***					
23. 12	34. 30	21. 15	·1129					
23. 28	35. 45	23. 0	·1104					
23. 59	36. 50	23. 59	·1106					
Feb. 19		Feb. 19		Feb. 19		Feb. 19		
0. 0	21. 36. 50	0. 0	·1106	0. 0	·02077	1. 36	[illegible]	[illegible]
0. 41	37. 45	0. 15	·1106	1. 59:	·01920	3. 0	[illegible]	[illegible]
0. 52	37. 25		***	3. 42	·01964	9. 0	[illegible]	[illegible]
2. 0	38. 0	1. 40	·1130	5. 12	·01725	21. 0	[illegible]	[illegible]
2. 18	37. 50		***	7. 25	·01676			
3. 41	33. 45	3. 15	·1108	9. 58	·01700			
4. 2	33. 35	4. 5	·1110	11. 10	·01737			
4. 52	28. 30	4. 40	·1102	11. 45	·01710			
5. 13	29. 10	5. 15:	·110[illegible]	14. 40	·018[illegible]			
5. 38	27. 35	6. 25	·1116	19. 21	·02256			
6. 9	26. 30		***	23. 11	·02167			
6. 32	28. 30	7. 12	·1105	23. 59	·021[illegible]			
6. 40	28. 20	7. 32	·1106					
7. 0	31. 0	7. 50	·1105					
7. 18	30. 40	8. 12	·1124					
7. 45	31. 55	8. 25	·1106					
8. 5	30. 50	8. 45	·1116					
8. 15	33. 20	9. 30	·1120					
8. 39	25. 40	10. 5	·1110					
9. 53	31. 25	10. 30	·1112					
10. 27	31. 10	10. 46	·1145					
10. 44	35. 10	11. 40:	·1118					
11. 19	28. 30	17. 12	·1136					
11. 35	29. 15	18. 32	·1130					
11. 44	28. 30		***					
12. 23	32. 25	22. 30	·111[illegible]					
	***	23. 5	·1114					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 19		Feb. 19						
h m	° ′ ″	h m		h m		h m	°	°
14. 47	21. 33. 30	23. 59	·1103					
15. 12	32. 30							
15. 22	33. 30							
16. 32	33. 45							
17. 8	32. 25							
18. 56	33. 10							
20. 4	33. 0							
20. 18	31. 25							
21. 52	33. 15							
22. 3	32. 20							
22. 12	33. 40							
22. 54	34. 30							
23. 11	37. 0							
	***							
23. 59	37. 0							
Feb. 20		Feb. 20		Feb. 20		Feb. 20		
0. 0	21. 37. 0	0. 0	·1103	0. 0	·02177	1. 0	42·0	42·2
0. 18	38. 25		***	1. 43:	·02039	3. 0	47·0	48·5
0. 59	36. 0	2. 50	·1104	3. 30	·01716	9. 0	48·0	47·5
2. 9	35. 20	4. 5	·1107	3. 43	·01738	22. 0	37·5	40·0
3. 47	31. 40	4. 20:	·1103	4. 41	·01676			
6. 2	31. 25	6. 20	·1104	5. 54	·01705			
6. 47	27. 40	6. 32	·1098	6. 10	·01740			
7. 9	30. 0	7. 0	·1105	6. 28	·01753			
7. 30	29. 40	7. 16	·1103	7. 6	·01804			
8. 14	31. 50	7. 35	·1108	9. 24	·01880			
8. 40	31. 30	7. 45	·1106	13. 45	·02180			
	***	8. 5	·1112	15. 2	·02287			
9. 37	33. 0	8. 42	·1116	21. 0	·02206			
	***	9. 3	·1108	23. 59	·02170			
10. 22	30. 40	9. 33	·1114					
	***	10. 0	·1108					
11. 23	33. 0	10. 32	·1116					
12. 14	31. 30	10. 45	·1112					
12. 31	32. 10		***					
12. 53	31. 30	14. 15	·1129					
13. 21	32. 50	15. 0	·1126					
14. 5	29. 20	22. 5	·1129					
	***	23. 59	·1122					
15. 17	32. 0							
15. 32	31. 10							
15. 52	32. 20							
16. 11	31. 40							
17. 30	33. 10							
20. 9	33. 15							
20. 40	32. 15							
21. 26	34. 5							
22. 22	35. 0							
22. 40	36. 30							
	***							
23. 45	37. 20							
23. 59	37. 10							
Feb. 21		Feb. 21		Feb. 21		Feb. 21		
0. 0	21. 37. 10	0. 0	·1122	0. 0	·02170	6. 30	42·2	44·0
0. 12	37. 0	0. 30	·1122	2. 32:	·02040	21. 0	37·3	41·2

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 21		Feb. 21		Feb. 21				
h m	° ′ ″	h m		h m		h m	°	°
0. 38	21. 37. 30	2. 12	·1120	6. 45:	·01664			
2. 29	35. 30	7. 12	·1132	9. 15	·01576			
4. 0	33. 0	8. 0	·1128	9. 34	·01557			
6. 52	31. 50	9. 22	·1124	13. 45	·01650			
9. 21	33. 55	9. 30	·1145	21. 43	{·02136			
9. 27	32. 50	9. 45	·1126		·02043			
9. 38	36. 15	10. 30	·1125	23. 59	·01996			
10. 6	28. 35	11. 40	·1128					
10. 58	31. 50	12. 32	·1127					
	***	19. 45:	·1140					
11. 55	32. 25	21. 0	·1130					
12. 27	30. 50	22. 50	·1125					
12. 55	31. 45	23. 59	·1118					
13. 27	30. 40							
14. 0	31. 30							
14. 29	30. 50							
15. 0	32. 10							
15. 42	31. 10							
17. 54	32. 35							
19. 58	31. 50							
20. 36	30. 25							
23. 59	37. 10							
Feb. 22		Feb. 22		Feb. 22		Feb. 22		
0. 0	21. 37. 10	0. 0	·1118	0. 0	·01996	1. 0	42·4	44·0
0. 22	37. 40		***	0. 20	·01970	3. 0	44·5	45·0
0. 51	39. 20	0. 43	·1112		(†)	9. 0	46·0	46·2
1. 40	38. 20	1. 32	·1107	1. 0	·01920*	21. 0	39·0	41·0
1. 47	39. 40	1. 46	·1110	3. 0	·01716*			
2. 52	37. 45		***	7. 15	·01729			
3. 1	38. 20	2. 45	·1103	9. 30	·01780			
3. 26	37. 30	3. 5	·1108	13. 24	·01956			
3. 56	38. 20	3. 20	·1103	17. 15	·02270			
4. 28	37. 45		***	22. 19	·02200			
6. 15	33. 45	4. 32	·1107	23. 59	·02218			
6. 42:	34. 30		***					
7. 28	32. 30	7. 15	·1108					
	***	8. 12	·1125					
8. 0	33. 25		***					
	***	8. 45	·1118					
10. 2	32. 30	8. 50	·1124					
	***	9. 17	·1122					
15. 0	35. 0	10. 5	·1128					
15. 29	33. 30	10. 32	·1124					
	***	11. 37	·1128					
18. 59	34. 0	11. 45	·1128					
19. 40	32. 45		***					
19. 47	33. 20	19. 50	·1149					
20. 6	32. 0	20. 5	·1144					
20. 30	31. 55	20. 20	·1149					
20. 52	30. 50	21. 5	·1144					
21. 26	31. 55	21. 12	·1148					
21. 35	31. 15		***					
21. 43	32. 40	22. 32	·1129					
21. 58	32. 30	23. 59	·1125					
23. 57	37. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Feb. 23

Greenwich Mean Solar Time.	Western Declination.
h m	° ' "
0. 3	21. 36. 30
0. 22	36. 50
0. 40	35. 10
1. 49	35. 0
2. 8	36. 15
	***
3. 0	36. 0
3. 13	34. 40
3. 30	35. 10
3. 52	34. 30
4. 45	35. 10
6. 0	33. 15
10. 26	31. 30
10. 44	30. 40
11. 15	28. 30
12. 30	31. 10
13. 22	34. 50
14. 6	32. 30
15. 59	33. 15
18. 44	32. 10
19. 55	32. 0
20. 59	30. 40
21. 46	30. 55
23. 59	35. 50

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
0. 0	·1125
0. 40	·1116
	***
1. 50	·1115
	***
3. 10	·1107
3. 35	·1112
3. 47	·1109
4. 25	·1110
5. 0	·1108
7. 0	·1114
7. 43	·1114
8. 58	·1120
	***
10. 54	·1113
11. 29	·1118
	***
12. 15	·1112
	***
13. 25	·1114
13. 45	·1121
15. 30	·1122
	***
20. 16	·1129
21. 0	·1126
	***
23. 0	·1108
	***
23. 59	·1102

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
0. 0	·02218
1. 38	·02137
5. 22	·01666
14. 10	·01638
18. 45	·01750
22. 30	·01939
23. 59	·01977

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
1. 0	42 ·5	42 ·5
3. 0	46 ·2	47 ·0
9. 0	47 ·2	48 ·0
21. 0	44 ·2	45 ·2

Feb. 24

Greenwich Mean Solar Time.	Western Declination.
0. 0	21. 35. 50
2. 2	37. 15
2. 43	35. 45
4. 42	32. 55
5. 58	32. 20
6. 28	33. 20
	***
11. 30	32. 10
	***
14. 28	33. 45
14. 58	34. 45
	***
16. 0	33. 30
	***
17. 11	33. 55
17. 27	35. 40
18. 13	33. 20
19. 12	34. 30
20. 15	32. 45
20. 27	31. 0
22. 30	32. 20
22. 46	33. 40
23. 30	35. 0
23. 59	35. 10

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
	(†)
1. 35	·1103
2. 0	·1105
2. 35	·1100
	***
5. 15	·1104
7. 0	·1112
9. 20	·1117
	***
12. 10	·1126
13. 10:	·1125
13. 59	·1132
14. 40	·1131
	***
16. 29	·1136
	***
17. 35	·1135
18. 7	·1141
18. 45	·1139
19. 43	·1145
	***
20. 44	·1142
22. 0	·1130
	***
23. 59	·1114

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
0. 0	·01977
1. 15	·01920
2. 44	·01722 ·01764
4. 26	·01792
4. 29	·01843
4. 50	·01842
11. 45	·02390
21. 52	·02188 ·02070
23. 59	·02040

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
1. 0	47 ·0	47 ·0
3. 0	51 ·2	50 ·1
9. 0	49 ·9	48 ·7
21. 6	39 ·0	41 ·0

Feb. 25

Greenwich Mean Solar Time.	Western Declination.
h m	° ' "
0. 0	21. 35. 5
0. 22	35. 30
0. 43	34. 40
1. 56	34. 45
4. 32	31. 30
6. 0	30. 20
6. 45	32. 0
	***
8. 14	31. 30
9. 10	33. 30
10. 0	28. 50
10. 44	31. 50
11. 29	33. 0
12. 16	31. 15
13. 41	34. 45
14. 7	36. 50
15. 17	30. 35
	***
18. 33	32. 20
	***
20. 0	30. 0
20. 10	29. 10
21. 12	29. 30
23. 59	37. 35

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
0. 0	·1114
	***
3. 0	·1119
3. 22	·1116
5. 0	·1122
5. 35	·1124
6. 5	·1127
6. 33	·1126
6. 53	·1128
	***
8. 0	·1128
8. 17	·1124
	***
9. 20	·1130
9. 45	·1137
10. 0	·1147
10. 30	·1134
10. 43	·1137
10. 55	·1136
11. 37:	·1141
12. 55	·1140
	***
14. 0	·1139
14. 27	·1148
15. 0	·1150
15. 37	·1146
16. 27	·1149
	***
19. 35	·1154
	***
22. 0	·1138
	***
23. 0	·1130
23. 59	·1132

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
0. 0	·02040
1. 45	·01938
3. 47	·01644
5. 22	·01604
10. 22	·01740
12. 16	·01837
14. 48	·02020
16. 43	·02190
21. 15	·02148
23. 59	·02070

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
1. 0	42 ·2	42 ·2
3. 0	46 ·0	46 ·0
9. 0	45 ·5	45 ·5
21. 0	36 ·0	38 ·2

Feb. 26

Greenwich Mean Solar Time.	Western Declination.
0. 0	21. 37. 35
0. 37	37. 40
4. 5	30. 0
5. 13	29. 40
7. 0	32. 10
10. 0	32. 0
14. 3	33. 5
16. 7	32. 30
	***
20. 22	30. 0
	***
23. 59	38. 40

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
0. 0	·1133
1. 25	·1126
2. 24	·1128
3. 25	·1125
4. 1	·1118
5. 45	·1119
7. 35	·1128
14. 37	·1144
17. 30	·1146
	***
20. 30	·1138
21. 30	·1130
22. 10	·1130
22. 40	·1125
	***
23. 59	·1130

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
0. 0	·02070
1. 28	·01990
4. 0	·01613
7. 13	·01610
11. 22	·01647
15. 0	·01749
21. 53	·02087
23. 4	·02124
23. 59	·02106

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
1. 0	40 ·4	41 ·0
3. 0	41 ·5	43 ·0
9. 0	45 ·4	46 ·0
21. 0	39 ·7	41 ·6

Feb. 27

Greenwich Mean Solar Time.	Western Declination.
0. 0	21. 38. 40
0. 10	40. 20
0. 34	38. 45
0. 56	37. 40

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
0. 0	·1130
	***
2. 18	·1128
	***

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
0. 0	·02106
1. 48	·01962
3. 30	·01707
5. 18	·01766

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
1. 0	45 ·2	44 ·4
3. 0	48 ·2	47 ·2
9. 0	47 ·0	46 ·3
21. 50	39 ·5	40 ·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 27		Feb. 27		Feb. 27				
h m	° ′ ″	h m		h m		h m	°	°
1. 8	21. 40. 0	2. 55	·1134	9. 34	·01970			
1. 39	36. 0	3. 7	·1128 ***	11. 20	·01995			
1. 54	36. 0			12. 30	·02084			
2. 35	34. 0	4. 0	·1138 ***	14. 7	·02246			
2. 59	34. 55			14. 30	·02208			
3. 15	33. 20 ***	4. 44	·1126 ***	16. 20	·02237			
				20. 14	·02190			
4. 0	33. 0	5. 7	·1132	23. 59	·02120			
4. 41	31. 25	5. 15	·1122 ***					
5. 6	32. 30							
5. 52	31. 30 ***	5. 25	·1120					
		5. 54	·1128					
7. 35	33. 20	6. 10	·1123					
8. 26	29. 15	6. 35:	·1125					
8. 56	30. 50	7. 5	·1117					
10. 6	29. 55	7. 28	·1114					
10. 29	28. 0	7. 40	·1117					
10. 40	29. 0	7. 50	·1112					
11. 12	26. 45	8. 9	·1121					
11. 41	30. 55	8. 18	·1118					
12. 18	28. 20	8. 38	·1124					
12. 40	32. 0	8. 57	·1120 ***					
13. 15	39. 0 ***							
		9. 40	·1130 ***					
13. 46	39. 0							
14. 12	32. 50	9. 52	·1126					
14. 15	33. 40	10. 14	·1134					
14. 26	30. 55	10. 22	·1126					
14. 45	33. 30	10. 30	·1132					
15. 6	32. 55	10. 39	·1130					
15. 15	34. 30	10. 59	·1154					
15. 27	33. 15	11. 17	·1131					
15. 36	35. 0	11. 45	·1141					
15. 52	33. 30	12. 7	·1139					
16. 15	36. 15	12. 24	·1132 ***					
17. 9	34. 10							
17. 35	34. 0	12. 50	·1133					
18. 13	32. 30	12. 59	·1138					
19. 26	32. 0	13. 10	·1130					
20. 0	30. 30 ***	13. 25	·1132					
		13. 47	·1149 ***					
21. 14	32. 0							
23. 0	38. 20	14. 9	·1143					
23. 44	39. 15	14. 17	·1136					
23. 59	38. 30	14. 25	·1142					
		14. 58	·1134					
		15. 10	·1136					
		15. 24	·1134					
		16. 16	·1143					
		16. 43	·1143					
		18. 0	·1152 ***					
		19. 28	·1147 ***					
		20. 10	·1139 ***					
		22. 10	·1128					
		22. 30	·1128					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Feb. 27						
h m	° ′ ″	h m		h m		h m	°	°
		23. 0	·1123					
		23. 59	·1128					
Feb. 28		Feb. 28		Feb. 28		Feb. 28		
0. 0	21. 38. 30	0. 0	·1128	0. 0	·02120	7. 30	39 ·5	41 ·5
0. 18	38. 10	0. 36	·1135	3. 52	·02057	21. 0	36 ·0	38 ·2
1. 15	39. 30	1. 55	·1132	9. 58:	·01974			
1. 58	37. 30	2. 29	·1138	16. 53	·02137			
2. 22	37. 45	3. 0	·1133	17. 7	·02106			
2. 45	36. 30	5. 40	·1138	21. 15	{ ·02150 ·01822			
3. 11	36. 20	7. 25	·1146 ***					
4. 14	33. 0			23. 59	·01807			
5. 18	31. 45	15. 16	·1149					
6. 0	32. 25	16. 45	·1154 ***					
8. 9	31. 25							
15. 4	33. 55	18. 24	·1153					
15. 36	35. 0	19. 30:	·1156					
16. 44	33. 5	22. 0	·1133					
17. 23	33. 40	23. 49	·1114					
17. 45	32. 15 ***		(†)					
20. 7	28. 30							
20. 23	28. 35							
23. 16	40. 55							
23. 56	41. 55							
Mar. 1		Mar. 1		Mar. 1		Mar. 1		
	(†)	0. 0	·1114	0. 0	·01807	1. 0	39 ·5	39 ·5
0. 30	21. 41. 50	0. 30	·1111	1. 23	·01777	3. 0	40 ·8	41 ·3
1. 23	43. 0	0. 39	·1116		(†)	9. 0	42 ·4	41 ·8
	(†)	1. 23	·1116	3. 0	·01696*	21. 0	39 ·0	40 ·8
3. 0	42. 46*		(†)	3. 44	·01920			
8. 55	25. 45	3. 0	·1123	4. 22	·01864 ***			
9. 39	29. 30	8. 55	·1106					
10. 15	28. 45	9. 15	·1116 ***	5. 28	·01917			
10. 30	29. 30			5. 40	·02096			
10. 48	21. 20	10. 29	·1108	5. 50	·02000 ***			
11. 22	15. 0	10. 53	·1129					
11. 45	15. 0	11. 21	·1103	6. 21	·01946			
11. 49	21. 30	11. 40	·1108	6. 41	·01968			
11. 53	20. 5	11. 55	·1159	6. 52	·01913			
12. 1	26. 50	12. 13	·1104	7. 23	·01837			
12. 12	25. 15	12. 28	·1104	8. 15	·01766			
12. 26	26. 0	12. 35	·1110	10. 45	·01696			
12. 55	33. 20	12. 42	·1109	11. 30	·01628			
13. 13	32. 0	12. 55	·1115	12. 12	·01660			
13. 23	33. 50	13. 14	·1108	12. 27	·01587			
13. 49	32. 30	13. 39	·1116 ***	13. 7	·01648			
14. 14	33. 35 ***			14. 53	·01739			
		14. 47	·1115 ***	20. 0	·01860			
18. 24	32. 0 ***			23. 59	·01890			
		16. 52	·1120 ***					
20. 18	30. 0 ***							
		19. 7:	·1127 ***					
21. 42	30. 50 ***							
		21. 5	·1115 ***					
22. 13	35. 20 ***							
		21. 43	·1100					
		21. 55	·1106					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 1		Mar. 1						
h m	° ′ ″	h m		h m		h m	°	°
22. 39	21. 35. 0 ***	23. 0	·1076 ***					
23. 59	40. 45	23. 59	·1082					
Mar. 2		Mar. 2		Mar. 2		Mar. 2		
0. 0	21. 40. 50 ***	0. 0	·1083 ***	0. 0	·01890	1. 0	42 ·2	41 ·4
0. 56	42. 45	0. 55	·1091 ***	3. 33	·01839	3. 0	40 ·0	41 ·7
1. 13	42. 0	1. 15	·1088 ***	5. 40	·01737	9. 0	42 ·0	42 ·0
1. 41	43. 0	2. 25	·1100 ***	8. 15	·01737	21. 5	37 ·2	39 ·2
1. 51	42. 30	3. 0	·1081 ***	12. 11	·01838			
1. 59	43. 40	4. 5	·1104 ***	15. 27	·01940			
2. 4	43. 0	5. 30	·1104	15. 40	·01899			
2. 13	44. 15 ***	5. 54	·1111	16. 25	·01895			
2. 50	44. 0	6. 6	·1106	17. 52	·01809			
3. 54	36. 40	6. 46	·1107	20. 12	·01850			
4. 32	37. 30	6. 55	·1113	23. 59	·01770			
5. 53	33. 20	7. 23	·1112					
6. 41	35. 0	7. 40	·1106 ***					
7. 1	33. 0	8. 5	·1130					
7. 24	33. 25	8. 17	·1118					
7. 51	18. 20	8. 25	·1121					
8. 3	18. 35	8. 33	·1114					
8. 53	30. 25	8. 45	·1116					
9. 10	28. 50	9. 0	·1111 ***					
9. 36	31. 50	10. 14	·1120					
9. 44	31. 10	10. 20	·1126					
11. 22	32. 45	10. 40	·1121					
12. 46	30. 40	11. 6	·1118					
13. 54	33. 55	11. 25	·1122					
14. 25	37. 10	11. 35	·1128					
15. 29	31. 30	12. 0	·1125					
15. 38	35. 0	12. 30	·1127 ***					
15. 51	32. 0	13. 13	·1124 ***					
16. 19	38. 25	13. 36	·1126					
16. 52	44. 35	14. 22	·1126 ***					
17. 15	40. 35	15. 0	·1134					
17. 41	39. 40	15. 14	·1129 ***					
17. 58	35. 10 ***	15. 40	·1130					
18. 44	34. 45	16. 5	·1150					
19. 7	37. 40	16. 23	·1140 ***					
19. 27	33. 40	16. 52	·1154 ***					
20. 19	33. 0 ***	17. 30	·1158 ***					
20. 51	34. 5	18. 5	·1138 ***					
21. 15	32. 30							
22. 22	33. 40							
22. 58	37. 20							
23. 20	40. 5							
23. 38	36. 15							
23. 59	36. 45							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Mar. 2						
h m	° ′ ″	h m		h m		h m	°	°
		19. 0	·1138 ***					
		19. 54	·1124 ***					
		20. 15	·1126					
		21. 7	·1115					
		21. 45	·1105					
		22. 15	·1105					
		22. 25	·1100					
		22. 45	·1100					
		23. 15	·1072					
		23. 59	·1099					
Mar. 3		Mar. 3		Mar. 3		Mar. 3		
0. 0	21. 36. 50		(†)	0. 0	·01770	1. 0	40 ·4	41 ·4
0. 12	38. 30	0. 15	·1102 ***	1. 30	·01682	3. 0	41 ·0	42 ·6
0. 40	37. 30	0. 45	·1109	4. 0	·01712	9. 0	43 ·2	45 ·0
0. 57	38. 30	1. 40	·1111	5. 0	·01680	21. 6	37 ·2	38 ·2
1. 44	39. 20	1. 46	·1106	6. 11	·01692			
2. 34	37. 25 ***	2. 7	·1106	7. 45	·01657			
3. 24	37. 20	2. 16	·1112	10. 52	·01686			
3. 43	36. 10	2. 31	·1105	15. 16	·01863			
3. 46	37. 5	2. 55	·1113 ***	21. 3	·02204			
4. 9	35. 0	3. 40	·1109	22. 45	·02210			
4. 15	35. 30	3. 50	·1118	23. 44	·02178 (†)			
4. 40	32. 50	4. 2	·1108					
4. 59	34. 30	4. 23	·1122					
5. 15	33. 30	4. 37	·1122					
5. 19	33. 40	4. 45	·1113					
5. 42	30. 30	5. 10	·1117					
5. 59	30. 30	5. 16	·1104					
6. 11	28. 40	5. 40	·1118					
6. 16	30. 20	5. 50	·1118					
6. 37	28. 5	6. 7	·1100					
6. 58	29. 30	7. 10	·1123					
7. 26	33. 30	7. 30	·1117					
7. 45	33. 0	7. 50	·1118 ***					
8. 28	35. 10	8. 30	·1126					
11. 13	33. 0	8. 54	·1122 ***					
17. 33	33. 30	14. 29	·1126					
18. 58	31. 0	14. 45	·1133					
19. 6	32. 0	15. 0	·1129 ***					
19. 43	30. 10	18. 15:	·1136 ***					
21. 47	31. 40	22. 40	·1100					
23. 59	36. 10	23. 59	·1100					
Mar. 4		Mar. 4		Mar. 4		Mar. 4		
0. 0	21. 36. 10	0. 0	·1100 ***		(†)	1. 0	42 ·5	42 ·3
0. 57	37. 45	2. 45	·1106 ***	0. 15	·02173	3. 0	47 ·0	46 ·0
3. 15	36. 20	4. 10	·1102	1. 43	·02013	9. 0	48 ·3	47 ·5
4. 12	33. 20	4. 30	·1104 ***	2. 57	·01770	21. 0	41 ·0	42 ·5
4. 21	33. 20			4. 2	·01823			
4. 41	32. 10			5. 54	·01806			
				7. 56	·01875			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 4		Mar. 4		Mar. 4				
h m	° ′ ″	h m		h m		h m	°	°
6. 10	21. 30. 40	6. 10	·1109 ***	9. 52	·01890			
6. 16	31. 15	7. 7	·1088	13. 15	·02038			
6. 52	31. 0	7. 23	·1100	17. 12	·02366			
7. 17	22. 30	7. 40	·1094	21. 25	·02322 ·02256			
7. 33	25. 5	7. 50	·1102	22. 45	·02249 ·02187			
7. 44	23. 55	8. 20	·1101	23. 59	·02168			
8. 29	32. 0	9. 6	·1111					
8. 53	29. 20	9. 30	·1127					
9. 21	32. 10	9. 55	·1118					
9. 45	29. 15	10. 40	·1117					
10. 28	32. 40	11. 6	·1120 ***					
10. 47	32. 0	12. 50	·1120					
13. 9	33. 40	13. 20	·1125					
13. 59	33. 10	13. 35	·1123 ***					
14. 15	33. 45	18. 45:	·1132 ***					
17. 11	33. 40	20. 45	·1120 ***					
19. 51	28. 30	23. 0	·1104					
20. 30	27. 50	23. 25	·1094 ***					
22. 13	32. 25	23. 53	·1092					
22. 36	34. 40	23. 59	·1095					
22. 44	37. 30							
22. 52	36. 5							
23. 19	38. 0							
23. 59	38. 30							
Mar. 5		Mar. 5		Mar. 5		Mar. 5		
0. 0	21. 38. 30	0. 0	·1096 ***	0. 0	·02168	1. 0	43 ·7	43 ·5
0. 43	39. 40	0. 50	·1109	0. 36	·02166	3. 0	44 ·0	45 ·6
0. 56	41. 30	1. 30	·1102 ***	2. 39	·02058	9. 0	47 ·4	48 ·0
1. 35	37. 40	2. 15	·1111	5. 12	·01777	21. 0	41 ·0	41 ·7
1. 54	38. 0	2. 30	·1108	5. 36	·01756 ***			
1. 58	39. 15	2. 51	·1124	7. 12	·01857			
2. 41	37. 45	3. 0	·1125	10. 7	·01736			
2. 58	40. 20	3. 13	·1116	11. 58	·01760			
3. 21	38. 30	3. 25	·1116	13. 13	·01830			
3. 28	38. 35	3. 47	·1104	17. 33	·02333			
3. 59	35. 30	4. 0	·1106	17. 43	·02308			
4. 7	36. 10	4. 9	·1103 ***	19. 23	·02300 ·02249			
4. 17	34. 50	5. 14	·1113	23. 59	·02117			
4. 26	35. 5	5. 25	·1112					
4. 54	33. 45	5. 35	·1126					
5. 40	34. 30	5. 43	·1119					
5. 51	32. 0	5. 59	·1132					
6. 27	30. 50	6. 30	·1084					
7. 12	8. 45	6. 44	·1080					
7. 23	14. 0	7. 0	·1102					
7. 40	24. 0	7. 10	·1089					
7. 44	23. 0	7. 17	·1112					
8. 29	33. 0	7. 25	·1088					
8. 44	31. 25	7. 30	·1089					
9. 21	33. 40	7. 42	·1083					
9. 45	32. 30	7. 55	·1084					
11. 13	33. 40	8. 5	·1090					
12. 8	30. 10							
12. 36	37. 15							
13. 8	33. 35							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 5		Mar. 5						
h m	° ′ ″	h m		h m		h m	°	°
15. 40	21. 35. 5	9. 5	·1106 ***					
16. 39	33. 50	10. 25	·1114 ***					
16. 56	31. 25 ***	11. 30	·1112					
17. 57	33. 40 ***	11. 45	·1124					
19. 7	32. 5	11. 59	·1116					
19. 18	31. 0	12. 10	·1118					
20. 14	30. 50	12. 31	·1112					
20. 24	29. 20	12. 43	·1117					
20. 49	30. 45	12. 50	·1116					
21. 44	35. 40	14. 0	·1118					
21. 57	35. 15	14. 10	·1116 ***					
22. 28	38. 30	16. 30	·1125					
22. 57	36. 45	17. 20	·1133					
23. 15	39. 10	17. 30	·1126 ***					
23. 35	37. 25	18. 5	·1122					
23. 59	39. 20	18. 40	·1128 ***					
		20. 30	·1127					
		21. 10	·1112					
		21. 28	·1112					
		22. 14	·1093					
		23. 15	·1106					
		23. 30	·1102					
		23. 45	·1106 (†)					
Mar. 6		Mar. 6		Mar. 6		Mar. 6		
0. 0	21. 39. 20	0. 0	·1106	0. 0	·02117 ***	1. 0	43 ·7	44 ·0
0. 15	43. 30	0. 15	·1112	3. 50	·01877	3. 0	46 ·0	45 ·0
0. 45	38. 0	0. 25	·1104	4. 24	·01813	9. 0	45 ·5	45 ·5
1. 7	46. 35	0. 54	·1102	7. 45	·01730	22. 45	37 ·2	38 ·5
1. 14	43. 40	1. 10	·1124	11. 11	·01796			
1. 26	46. 50	1. 22	·1105	11. 29	·01763			
1. 39	44. 40	1. 31	·1108	17. 52	·02300			
2. 27	42. 30	1. 50	·1091	21. 27	·02250			
2. 33	44. 40	2. 26	·1100	21. 52	·02217			
2. 47	39. 50	2. 45	·1088	23. 59	·02024			
2. 53	40. 10	3. 17	·1111					
2. 59	39. 30	3. 35	·1094					
3. 5	40. 30	3. 55	·1106					
3. 15	37. 35	4. 10	·1101					
3. 26	37. 45	4. 18	·1101					
3. 44	31. 30	4. 25	·1095					
3. 53	32. 30	4. 39	·1095					
4. 0	32. 25	4. 51	·1102					
4. 14	34. 0	5. 20	·1104					
4. 29	34. 0	5. 54	·1104					
4. 41	33. 15	6. 13	·1100					
4. 52	33. 15	6. 30	·1102					
6. 14	31. 5	6. 40	·1100					
6. 30	32. 30	6. 55	·1104					
7. 10	27. 20	7. 6	·1102					
7. 21	28. 40	7. 20	·1107					
7. 39	24. 30	7. 38	·1102					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 6		Mar. 6						
h m	° ′ ″	h m		h m		h m	°	°
7. 58	21. 27. 0	7. 50	·1108					
9. 52	33. 0	8. 7	·1110					
10. 17	31. 30	8. 25	·1120					
10. 44	31. 45	9. 0	·1110					
10. 48	28. 10	9. 20	·1116					
11. 12:	33. 55	10. 0	·1120					
11. 30	31. 30	10. 45	·1119					
11. 47	33. 0	11. 0	·1168					
	***	11. 35	·1122					
14. 2	34. 30	12. 10	·1125					
	***	12. 30	·1126					
15. 30	34. 0	13. 40	·1128					
16. 9	33. 0		***					
16. 36	33. 45	14. 17	·1133					
19. 15	32. 30	14. 25	·1131					
20. 0	30. 25	16. 0	·1134					
20. 47	33. 0	16. 30	·1133					
20. 52	32. 10	18. 0	·1136					
21. 40	32. 55	19. 0	·1136					
23. 59	39. 0		***					
		20. 10	·1142					
		21. 0	·1130					
		23. 0	·1118					
		23. 59	·1122					
Mar. 7		Mar. 7		Mar. 7		Mar. 7		
0. 0	21. 39. 0	0. 0	·1122	0. 0	·02024	6. 57	40·7	41·7
0. 57	39. 40	0. 20	·1122	3. 0	·01985	21. 0	40·2	41·6
1. 18	38. 25	1. 44	·1132	7. 10	·01792			
1. 45	38. 30		***	9. 52	·01730			
4. 0	34. 30	3. 40	·1132	12. 39	·01785			
4. 9	36. 0	4. 0	·1135	16. 7	·01704			
4. 43	33. 50		***	18. 44	·01664			
5. 56	33. 45	4. 5	·1142	23. 59	·01683			
6. 40	32. 40	4. 40	·1130					
7. 6	32. 30	4. 58	·1134					
7. 21	31. 30	5. 10	·1130					
7. 33	31. 45	6. 24	·1136					
7. 50	31. 10	7. 10	·1132					
8. 18	32. 55	8. 35	·1138					
8. 40	28. 30	12. 45	·1137					
9. 19	33. 0	13. 0	·1140					
9. 43	31. 50	13. 39	·1135					
10. 28	32. 25	14. 20	·1143					
11. 34	31. 55		***					
12. 51	32. 45	17. 25	·1134					
13. 15	32. 0	18. 0	·1142					
13. 52	33. 20		***					
14. 18	30. 50	19. 42	·1134					
15. 14	30. 40	20. 14	·1136					
15. 30	29. 30	21. 28	·1122					
15. 54	29. 10	21. 50	·1125					
17. 44	31. 50	22. 45	·1117					
18. 15	30. 20		***					
	***	23. 59	·1119					
20. 41	31. 20							
21. 41	34. 0							

Greenwich Mean Solar Time.	Western Declination	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 7								
h m	° ′ ″	h m		h m		h m	°	°
22. 43	21. 34. 15							
	***							
23. 59	38. 25							
Mar. 8		Mar. 8		Mar. 8		Mar. 8		
0. 0	21. 38. 25	0. 0	·1119	0. 0	·01683	1. 0	44·0	43·6
	***	0. 11	·1116	1. 28	·01657	3. 0	46·2	45·5
0. 43	41. 10	0. 42	·1125	3. 40	·01737	9. 0	45·4	45·2
1. 9	39. 0	1. 0	·1119	7. 25	·01690	21. 0	36·5	38·0
1. 14	39. 50	1. 15	·1122	10. 15	·01740			
1. 29	38. 0	1. 30	·1117	12. 40	·01893			
2. 0	37. 30	2. 0	·1120	17. 0	·02296			
2. 12	38. 25	2. 13	·1126	21. 7	·02225			
	***	2. 55	·1118	21. 39	·02142			
4. 15	31. 30		***	23. 59	·02026			
4. 36	31. 50	4. 10	·1114					
5. 26	31. 10		***					
6. 44	32. 30	4. 37	·1118					
7. 29	31. 0	4. 55	·1114					
10. 39	32. 30	5. 30	·1118					
11. 54	33. 30	7. 13	·1118					
12. 11	35. 30	7. 55	·1125					
12. 39	33. 40	8. 8	·1121					
	***	9. 35	·1128					
15. 36	35. 10		***					
	***	12. 10	·1134					
16. 43	32. 40	12. 25	·1144					
	***	13. 10:	·1134					
19. 41	32. 30		***					
19. 55	31. 10	16. 58	·1144					
22. 43	35. 10	17. 14	·1141					
23. 8	37. 20	19. 14	·1145					
23. 59	37. 35		***					
		20. 30:	·1142					
			***					
		22. 30	·1128					
		23. 0	·1128					
		23. 25	·1124					
		23. 59	·1119					
Mar. 9		Mar. 9		Mar. 9		Mar. 9		
0. 0	21. 37. 35	0. 0	·1119	0. 0	·02026	1. 0	41·4	41·2
0. 37	38. 30		***	0. 40	·01993	3. 0	45·0	44·0
2. 53	36. 20	3. 0	·1119	3. 3	·01744 ·01913	9. 0	46·8	47·0
3. 30	34. 0	4. 0:	·1114			21. 0	39·0	40·7
5. 30	31. 30		***	4. 22	·01757			
7. 58	33. 30	5. 35	·1118	7. 11	·01697			
	***	7. 15:	·1118	10. 22	·01727			
14. 21	34. 0		***	14. 45	·01802			
	***	11. 15	·1129	20. 55	·02290			
18. 52	31. 45	14. 0	·1130	21. 30	·02270			
20. 23	28. 30	18. 30:	·1136	22. 50	·02273			
20. 40	29. 0	21. 18	·1118	23. 59	·02235			
20. 54	28. 35		***					
23. 59	37. 30	23. 15	·1108					
		23. 59	·1107					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.10		Mar.10		Mar.10		Mar.10		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 37. 30	0. 0	·1107	0. 0	·02235	1. 0	44·2	44·0
0. 55	39. 0		***	1. 50	·02070	3. 0	47·3	46·8
2. 0	37. 45	2. 10	·1103	3. 40	·01785	9. 0	47·3	47·3
2. 13	37. 50	3. 0	·1108	6. 40	·01745	21. 0	37·0	40·0
3. 0	36. 30	4. 0	·1109	6. 52	·01766			
3. 14	36. 45		***	12. 31⁚	·01928			
4. 15	33. 15	5. 0	·1106	17. 40	·02337			
6. 0	31. 20		***	23. 59	·02200			
7. 39	33. 0	6. 13	·1106					
8. 9	32. 30		***					
9. 30	33. 0	7. 59	·1118					
10. 6	32. 30		***					
13. 30	34. 30	9. 5	·1118					
15. 40	34. 0	16. 50	·1136					
16. 13	34. 50	18. 55	·1138					
	***	20. 0	·1134					
18. 59	32. 50	21. 29	·1117					
19. 41	29. 30	22. 14	·1119					
20. 13	28. 30	22. 40	·1114					
20. 42	30. 0	23. 55	·1117					
20. 50	29. 35							
21. 39	30. 40							
23. 30	38. 20							
23. 59	39. 30							
Mar.11		Mar.11		Mar.11		Mar.11		
1. 0	21. 39. 16*		(†)	0. 0	·02200	1. 0	48·7	41·6
3. 0	36. 47*	1. 0	·1117*	2. 56	·02027	3. 0	44·0	44·5
9. 0	30. 54*	3. 0	·1124*	4. 28	·01762	9. 0	47·5	47·5
21. 0	27. 27*	3. 30	·1124	7. 15	·01739	21. 0	38·5	39·5
		4. 15⁚	·1116	10. 0	·01817			
		6. 25	·1120	13. 45	·01977			
		8. 0	·1121	18. 11	·02338			
		9. 10	·1126	21. 31	·02260			
		13. 20	·1132		(†)			
		13. 30	·1139	22. 22	·01921			
			***	23. 59	·01860			
		14. 52	·1139					
			***					
		18. 30⁚	·1147					
		22. 30	·1120					
			***					
		23. 30	·1119					
		23. 45	·1113					
		23. 59	·1119					
Mar.12		Mar.12		Mar.12		Mar.12		
	(†)	0. 0	·1120	0. 0	·01860	1. 0	40·8	41·4
0. 51	21. 40. 30	0. 50	·1118	2. 55	{ ·01677 ·01837	3. 0	43·5	43·5
1. 10	41. 30		***			9. 0	46·0	45·2
1. 50	40. 50	1. 10	·1120	5. 21	·01664	21. 0	42·3	44·0
2. 16	42. 30	1. 48	·1116	7. 24	·01638			
	***	2. 4	·1124	11. 7	·01707			
3. 15	35. 30		***	11. 28	·01688			
3. 29	36. 20	2. 55	·1112	14. 7	·01810			
4. 26	33. 45	3. 8	·1116	14. 22	·01793			
5. 32	32. 0	3. 15	·1107	14. 56	·01844			
5. 37	32. 20	4. 52	·1121	15. 38	·01820			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.12		Mar.12		Mar.12				
h m	° ′ ″	h m		h m		h m	°	°
6. 13	21. 29. 30	5. 25	·1119	15. 58	·01874			
6. 38	30. 45	5. 44	·1125	16. 12	·01828			
7. 7	29. 15	6. 15	·1117	16. 30	·01830			
7. 29	30. 5	6. 55	·1120	16. 51	·01894			
7. 42	29. 30		***	17. 12	·01864			
8. 15	31. 0	7. 30	·1113	17. 16	·01900			
8. 44	29. 30		***	17. 40	·01847			
9. 41	29. 5	8. 25	·1125	17. 52	·01894			
9. 52	30. 30		***	18. 30	·01840			
10. 11	30. 0	9. 25	·1128	18. 44	·01856			
10. 18	31. 20	9. 40	·1125	18. 59	·01847			
10. 44	31. 30	10. 0	·1130	19. 15	·01850			
11. 42	26. 15	10. 25	·1133		***			
12. 15	31. 5	10. 45	·1126	21. 56	·01670			
12. 43	27. 0	11. 12	·1143	22. 59	{ ·01553 ·01583			
13. 13	31. 30		***					
13. 30	30. 15	12. 5	·1132	23. 59	·01645			
13. 56	33. 45	12. 30	·1142					
14. 28	22. 50	13. 0	·1132					
15. 10	38. 20	13. 43	·1141					
15. 13	37. 0	13. 55	·1138					
15. 15	38. 30	14. 5	·1143					
15. 30	31. 30	14. 33	·1134					
15. 46	45. 55	14. 45	·1138					
16. 22	28. 30	14. 55	·1151					
16. 46	43. 5	15. 5	·1142					
16. 52	45. 0	15. 26	·1160					
16. 58	41. 10	15. 45	·1135					
17. 14	51. 0	16. 0	·1172					
17. 30	40. 25	16. 15	·1154					
17. 44	44. 25	16. 39	·1116					
17. 51	41. 30	16. 55	·1126					
	***	17. 5	·1113					
18. 13	44. 55	17. 10	·1126					
18. 30	38. 30	17. 22	·1122					
18. 41	41. 50	17. 40	·1094					
18. 52	41. 0	18. 3	·1113					
	***	18. 14	·1107					
19. 7	41. 25	18. 27	·1112					
19. 15	43. 20	18. 39	·1095					
19. 30	38. 0	18. 50	·1104					
19. 36	40. 0	19. 10	·1082					
19. 44	38. 0	19. 24	·1081					
19. 49	43. 30	19. 32	·1072					
20. 9	36. 40	19. 45	·1086					
20. 15	37. 30	19. 50	·1076					
20. 29	34. 25	20. 0	·1095					
20. 40	39. 25	20. 15	·1094					
21. 0	34. 0	20. 32	·1080					
21. 22	35. 30	20. 44	·1078					
21. 39	42. 0	20. 50	·1069					
21. 42	44. 0		***					
21. 51	40. 45	21. 20	·1071					
21. 54	42. 30	22. 0	·1100					
21. 58	41. 50	22. 17	·1098					
22. 2	43. 30	22. 28	·1089					
	***	23. 8	·1082					
22. 44	38. 30		***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁚ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 12		Mar. 12						
h m	° ′ ″	h m		h m		h m	°	°
22. 51	21. 41. 10	23. 54	·1082					
23. 2	41. 20		(†)					
23. 15	40. 15							
23. 29	42. 30							
23. 53	41. 30							
	(†)							
Mar. 13		Mar. 13		Mar. 13		Mar. 13		
	(†)	0. 0	·1092	0. 0	·01645	1. 0	47·3	47·5
0. 10	21. 46. 0		***		***	3. 0	50·7	50·4
0. 28	46. 15	0. 40	·1091	2. 14	·01839	9. 0	52·4	52·0
0. 52	42. 30	1. 0	·1084	5. 23	·01907	22. 35	46·0	47·0
1. 19	49. 0	1. 13	·1094	6. 2	·01904			
1. 44	42. 0	1. 45	·1078	6. 42	·01940			
1. 51	43. 20	2. 0	·1089	8. 15	·01930			
1. 59	42. 55	2. 14	·1098	8. 26	·01963			
2. 13	44. 30	2. 30	·1099	8. 42	·01907			
2. 22	43. 20	2. 42	·1092	10. 22	·01810			
2. 30	43. 45	2. 53	·1098	12. 15	·01866			
2. 35	43. 0	3. 15	·1083	12. 52	·01730			
2. 46	46. 0	3. 30	·1095	13. 12	·01810			
3. 15	41. 55	3. 45	·1100	14. 0	·01855			
	***	3. 54	·1108	14. 42	·01917			
3. 44	41. 0	4. 10	·1106	15. 22	·01977			
3. 50	41. 55	4. 14	·1100	16. 30	·02000			
4. 29	42. 20	4. 30	·1101	17. 18	·02033			
4. 54	43. 20	4. 36	·1105	17. 40	·02014			
5. 28	41. 10		***	17. 45	·01960			
5. 49	40. 25	5. 15	·1105	18. 10	·01966			
6. 14	41. 10	5. 26	·1095	20. 10	·02300			
6. 45	37. 15	5. 35	·1093	21. 22	·02413			
	***	6. 0	·1101	22. 0	·02392			
7. 15	38. 20	6. 18	·1091	23. 59	·02423			
7. 28	36. 50	7. 10	·1100					
7. 41	37. 45	7. 16	·1095					
7. 51	36. 50	7. 32	·1098					
8. 12	19. 30	7. 40	·1095					
8. 18	21. 0	7. 47	·1098					
8. 29	18. 25	7. 50	·1088					
8. 42	28. 10	8. 8	·1095					
8. 47	28. 0	8. 15	·1077					
8. 52	31. 0	8. 35	·1088					
9. 5	31. 0		***					
9. 14	32. 25	8. 49	·1082					
9. 30	28. 0	9. 10	·1085					
9. 43	30. 0	9. 17	·1082					
9. 50	28. 40	9. 43	·1099					
9. 59	31. 0	9. 57	·1091					
10. 11	29. 15	10. 9	·1082					
10. 44	33. 40	10. 30	·1095					
11. 6	35. 15	10. 48	·1091					
11. 28	29. 30	11. 3	·1093					
11. 36	42. 45	11. 24	·1076					
11. 41	40. 0	11. 33	·1076					
11. 46	47. 50	11. 41	·1072					
12. 14	25. 15	11. 52	·1109					
12. 38	28. 40	12. 6	·1077					
13. 21	20. 5	12. 13	·1079					
13. 44	27. 35	12. 28	·1100					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 13		Mar. 13						
h m	° ′ ″	h m		h m		h m	°	°
14. 9	21. 23. 10	12. 45	·1086					
14. 28	24. 15	13. 2	·1086					
14. 40	22. 10	13. 13	·1082					
14. 52	21. 40	13. 39	·1088					
15. 13	15. 25	13. 55	·1077					
15. 16	15. 55	14. 17	·1088					
15. 39	10. 0		***					
15. 52	16. 55	14. 55	·1082					
16. 1	16. 10	15. 17	·1099					
16. 40	40. 0	15. 45	·1102					
17. 15	21. 0	16. 0	·1089					
17. 35	27. 5	16. 10	·1094					
	***	16. 15	·1092					
19. 3	30. 0	16. 25	·1094					
19. 12	35. 30	16. 32	·1083					
	***	16. 45	·1102					
19. 45	30. 0	16. 53	·1099					
20. 3	29. 10	17. 6	·1102					
20. 16	29. 30	17. 15	·1095					
20. 23	28. 5	17. 25	·1098					
20. 45	33. 45	17. 42	·1093					
	***	18. 7	·1099					
22. 19	32. 30	18. 26	·1092					
22. 45	34. 30	18. 45	·1093					
23. 29	34. 15	18. 50	·1090					
23. 40	36. 45	19. 15	·1102					
23. 59	35. 50	19. 32	·1104					
			***					
		20. 20	·1099					
		20. 30	·1094					
		20. 45	·1103					
		20. 59	·1093					
			***					
		21. 32	·1088					
			***					
		23. 59	·1098					
Mar. 14		Mar. 14		Mar. 14		Mar. 14		
0. 0	21. 35. 50	0. 0	·1098	0. 0	·02423	7. 46	48·0	48·5
0. 13	35. 15	0. 13	·1094	0. 14	·02426	21. 0	46·0	46·8
0. 34	41. 30	0. 30	·1104	0. 30	·02453			
0. 53	41. 30	0. 50	·1100	3. 0	·02492			
1. 6	40. 0	1. 2	·1091	3. 32	·02433			
1. 23	42. 55	1. 20	·1094	4. 7	·02448			
1. 38	42. 30	1. 30	·1088	4. 46	·02416			
	***	1. 50	·1085		***			
2. 41	46. 0	2. 5	·1091	5. 45	·02412			
3. 19	40. 30	2. 15	·1089	6. 10	·02346			
3. 28	43. 30	2. 24	·1096	6. 29	·02308			
3. 32	42. 0	2. 28	·1091	6. 40	·02328			
3. 45	42. 20	3. 3	·1094	6. 52	·02267			
4. 1	40. 0	3. 15	·1088	7. 52	·02100			
4. 9	41. 0	3. 29	·1102	9. 10	·02190			
4. 27	35. 30	3. 34	·1096	9. 40	·01970			
4. 40	39. 30	3. 45	·1102		***			
4. 51	36. 30	3. 53	·1096	10. 15	·02100			
5. 7	41. 20	4. 6	·1102	10. 55	·02047			
5. 15	37. 0	4. 11	·1108	11. 9	·02084			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 14		Mar. 14		Mar. 14				
h m	° ′ ″	h m		h m		h m	°	°
5. 23	21. 38. 15	4. 17	·1102	11. 26	·02038			
5. 38	34. 30	4. 25	·1095	11. 40	·02000			
5. 46	39. 30	4. 28	·1102	11. 45	·02015			
5. 58	27. 30	4. 40	·1104	11. 52	·01998			
6. 7	33. 10	4. 46	·1094	12. 15	·02040			
6. 12	33. 55	4. 53	·1105	12. 30	·02017			
6. 33	31. 10	5. 7	·1124	13. 0	·02008			
6. 44	17. 25	5. 15	·1115	13. 40	·02092			
6. 54	37. 0	5. 20	·1123	14. 12	·02048			
7. 15	14. 30	5. 29	·1108	15. 13	·02184			
7. 20	14. 55	5. 39	·1108	15. 50	·02207			
7. 30	14. 30	5. 44	·1116	16. 11	·02166			
7. 43	26. 0	5. 53	·1095	16. 45	·02150			
7. 58	20. 5	6. 0	·1118	17. 55	·02193			
8. 7	22. 20		***	22. 25	·02207			
8. 14	21. 30	6. 38	·1112	23. 59	·02093			
8. 28	27. 20	6. 44	·1143					
8. 44	24. 25	6. 59	·1080					
8. 56	27. 30	7. 30	·1122					
9. 15	14. 30	7. 50	·1086					
9. 36	43. 15	7. 58	·1092					
9. 45	28. 5	8. 7	·1088					
	***	8. 20	·1097					
10. 0	27. 50	8. 30	·1085					
10. 15	21. 35	8. 42	·1086					
10. 29	24. 45		***					
10. 44	29. 30	9. 0	·1076					
10. 58	10. 25	9. 13	·1138					
11. 7	29. 30	9. 42	·1061					
11. 15	17. 0	9. 59	·1092					
11. 30	14. 20	10. 6	·1086					
11. 39	22. 5	10. 16	·1098					
11. 43	17. 35	10. 25	·1106					
11. 57	24. 20	10. 40	·1101					
12. 36	20. 50	10. 55	·1080					
12. 48	24. 30	11. 5	·1141					
13. 13	21. 30	11. 16	·1102					
13. 36	35. 25	11. 25	·1112					
13. 58	29. 20	11. 30	·1102					
14. 17	26. 30	11. 40	·1120					
14. 39	30. 0	11. 52	·1090					
14. 48	29. 30	12. 10	·1106					
15. 10	33. 0	12. 25	·1099					
15. 17	32. 40	12. 30	·1103					
15. 33	34. 35	13. 0	·1071					
15. 43	34. 30	13. 40	·1125					
15. 53	32. 15	14. 14	·1089					
16. 13	36. 30	14. 30	·1094					
16. 43	32. 0	14. 40	·1086					
16. 54	32. 0	15. 9	·1098					
17. 14	30. 30	15. 22	·1096					
17. 22	30. 35	15. 45	·1102					
17. 30	29. 10	15. 46	·1099					
17. 45	33. 25		***					
17. 58	32. 30	16. 30	·1099					
18. 9	33. 30	16. 53	·1112					
18. 26	32. 30	17. 25	·1096					
18. 38	33. 0	17. 44	·1104					
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 14		Mar. 14						
h m	° ′ ″	h m		h m		h m	°	°
19. 0	21. 30. 30	17. 54	·1096					
19. 15	39. 30	18. 10	·1109					
19. 43	34. 15	18. 15	.1105					
	***	18. 40	·1112					
19. 52	34. 0		***					
20. 19	30. 0	18. 55	.1107					
	***	19. 14	·1120					
20. 58	30. 30		***					
	***	19. 30	·1106					
21. 13	31. 50	19. 52	·1116					
21. 26	30. 0		***					
21. 51	31. 40	20. 25	·1102					
22. 15	31. 25	20. 45	·1102					
	***		***					
22. 59	38. 30	21. 25	·1083					
23. 15	37. 30	21. 55	·1074					
23. 45	37. 30	22. 25	·1090					
23. 59	38. 20		***					
		23. 35	·1076					
		23. 59	·1088					
Mar. 15		Mar. 15		Mar. 15		Mar. 15		
0. 0	21. 38. 25	0. 0	·1088	0. 0	·02093	1. 0	49·0	49·0
0. 14	43. 10	0. 13	·1099	1. 26	·01976	3. 0	51·2	51·7
	***		***	2. 30	·01937	9. 0	53·7	54·0
1. 28	34. 15	0. 45	·1088	2. 44	·01908	21. 0	50·3	51·2
2. 14	40. 0		***	3. 0	·02010			
2. 30	44. 30	1. 25	·1094	4. 12	·01964			
2. 44	33. 30	1. 47	·1108	4. 30	·01967			
3. 0	29. 10	2. 10	·1102	5. 43	·01900			
3. 13	33. 25	2. 25	·1092	6. 43	·01907			
3. 23	32. 10	2. 34	·1103		***			
3. 38	32. 50	2. 42	·1082	8. 42	·01824			
3. 46	31. 30	3. 0	·1106	9. 42	·01840			
	***	3. 7	·1128	10. 2	·01746			
4. 15	34. 55	3. 38	·1108	10. 39	·01770			
4. 41	33. 5	3. 55	·1094	11. 25	·01730			
5. 9	35. 0		***	12. 52	·01712			
5. 28	34. 10	5. 30	·1095	14. 22	·01733			
5. 42:	34. 30	6. 1	·1105	14. 51	·01770			
6. 16	25. 45	6. 15	·1094	15. 40	·01800			
6. 28	23. 15	6. 25	·1098	16. 29	·01870			
6. 53	27. 0	6. 47	·1118	22. 1	·02173			
7. 9	24. 0	6. 54	·1110	23. 59	·02142			
7. 15	24. 50	7. 5	·1113					
7. 22	20. 20	7. 15	·1122					
7. 37	26. 55	7. 22	·1113					
8. 9	22. 30	7. 31	·1132					
8. 27	26. 45	7. 46	·1112					
8. 40	21. 0		***					
8. 46	24. 0	8. 10	·1126					
9. 24	21. 50	8. 35	·1102					
9. 41	36. 50	8. 46	·1110					
10. 4	20. 25		***					
	***	9. 28	·1082					
10. 51	22. 0	9. 36	·1106					
11. 27	33. 30	9. 44	·1100					
11. 37	33. 40	9. 57	·1088					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Mar.15		Mar.15						
h m	° ′ ″	h m		h m		h m	°	°
12. 2	21. 26. 30	10. 14	·1096 ***					
12. 22	28. 5							
12. 37	26. 20	10. 45	·1098					
12. 56	29. 30	10. 55	·1108					
13. 9	28. 40	11. 13	·1084					
13. 28	36. 20	11. 25	·1086					
13. 39	38. 30	11. 43	·1098					
14. 10	30. 0	11. 48	·1096					
14. 32:	33. 0	12. 16	·1104					
15. 15	27. 40	12. 39	·1092					
15. 38	27. 30	12. 47	·1104					
16. 0	29. 10	12. 58	·1102					
16. 22	28. 35	13. 11	·1087					
16. 30	29. 15	13. 30	·1087					
16. 54	26. 50	13. 50	·1110					
17. 38	30. 50	14. 2	·1098 ***					
17. 53	33. 30							
18. 9	33. 40	14. 50	·1104 ***					
18. 18	32. 30							
18. 32	33. 30 ***	15. 58	·1095					
		16. 30	·1107					
19. 29	29. 35	16. 41	·1105					
19. 33	30. 30 ***	16. 56	·1108					
		17. 40	·1094					
20. 21	28. 40 ***	18. 2	·1103 ***					
21. 14	29. 15	19. 0	·1104 ***					
21. 32	32. 30							
21. 45	31. 35	19. 44	·1098 ***					
22. 23	32. 40							
23. 0	35. 30	20. 11	·1088 ***					
23. 12	37. 25							
23. 35	37. 20	21. 40	·1079					
23. 52	39. 0	21. 55	·1071					
23. 59	40. 0	22. 45	·1079					
		23. 45	·1090					
		23. 59	·1086					
Mar.16		Mar.16		Mar.16		Mar.16		
0. 0	21. 40. 0 ***	0. 0	·1086 ***	0. 0	·02142	1. 0	54 ·6	54 ·3
				1. 43	·01933	3. 0	55 ·0	56 ·6
1. 11	39. 30	0. 40	·1074	3. 0	·02027	9. 0	60 ·0	59 ·0
1. 30	41. 55	1. 5	·1083	4. 24	·02027	21. 0	53 ·9	54 ·3
1. 54	39. 30	1. 30	·1096	9. 3	·02124			
2. 6	40. 15	2. 14	·1082	9. 34	·02076			
2. 16	38. 30	2. 24	·1090	15. 6	·02283			
2. 40	39. 35	2. 40	·1092	19. 14	·02613			
3. 30	35. 0	3. 0	·1085 ***	22. 59	·02550			
3. 44	36. 0			23. 59	·02580			
4. 28	33. 25	4. 40	·1094 ***					
4. 32	33. 50							
4. 55	32. 30	5. 19	·1106					
5. 11	33. 35	5. 40	·1093					
5. 28	32. 30	6. 3	·1082					
5. 32	33. 5 ***	6. 25	·1090					
		6. 40	·1085					
6. 51	28. 0	6. 59	·1092					
7. 15	29. 20	7. 30	·1092 ***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Mar.16		Mar.16						
h m	° ′ ″	h m		h m		h m	°	°
7. 30	21. 28. 0	8. 40	·1084					
7. 58	31. 0	8. 50	·1088					
8. 30	28. 30	9. 0	·1110					
8. 39	30. 0	9. 10	·1103					
8. 45	29. 30 ***	9. 25	·1097					
		9. 45	·1103					
9. 15	35. 0	10. 12	·1100					
9. 45	30. 5	10. 26	·1090					
9. 52	30. 15	10. 42	·1092					
10. 8	28. 0 ***	11. 0	·1098 ***					
10. 45	26. 0	12. 0	·1096					
11. 14	31. 50	12. 13	·1099					
11. 40	33. 20	12. 20	·1096					
11. 52	33. 10	12. 37	·1098					
12. 7	34. 35	12. 58	·1094					
12. 40	32. 30	13. 57	·1106					
13. 13	37. 30	14. 15	·1102					
13. 45	35. 30	15. 0:	·1108 ***					
14. 15	37. 10							
15. 10	30. 0	16. 1	·1100 ***					
15. 28	30. 20							
15. 40	31. 40	17. 14	·1099 ***					
15. 52	31. 30 ***							
		18. 0	·1108 ***					
16. 40	32. 30 ***							
		18. 25	·1099 ***					
17. 39	30. 40 ***							
		19. 14	·1099 ***					
17. 58	32. 10							
18. 40	32. 15	20. 55	·1074					
19. 25	33. 20 ***	21. 30	·1075 ***					
20. 10	29. 25 ***	22. 0	·1084 ***					
22. 15	32. 10	23. 59	·1072					
22. 28	34. 5 ***							
23. 59	40. 0							
Mar.17		Mar.17		Mar.17		Mar.17		
0. 0	21. 40. 0	0. 0	·1073 ***	0. 0	·02580	1. 0	55 ·0	54 ·6
0. 32	41. 30			2. 15	·02543	3. 0	57 ·0	56 ·4
1. 8	38. 30	1. 0	·1072	4. 29	·02304	9. 0	57 ·5	57 ·5
1. 42	41. 0	1. 40	·1088	6. 11	·02284	21. 0	52 ·2	52 ·7
2. 12	39. 50	2. 14	·1079	6. 22	·02240			
2. 20	41. 20	2. 28	·1086	7. 40	·02170			
3. 14	35. 30	2. 44	·1080 ***	10. 56	·02206			
3. 29	35. 20			11. 42	·02243			
3. 34	36. 0	3. 58	·1098	12. 17	·02197			
3. 44	36. 5	4. 8	·1096	15. 22	·02398			
3. 57	36. 50	4. 30	·1096	15. 44	·02364			
4. 52	33. 45	4. 56	·1108	17. 28	·02552 ·02508			
5. 17	25. 0	5. 5	·1103					
5. 23	25. 30	5. 24	·1116	21. 2	·02507 ·02170			
5. 36	22. 0	5. 38	·1114					
5. 45	24. 0	5. 40	·1119	23. 4	·02163			
5. 52	23. 30	5. 54	·1112	23. 59	·02098			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.17		Mar.17						
h m	° ′ ″	h m		h m		h m	°	°
5.59	21.24.30	6. 0	·1113					
6.10	27. 5	6.10	·1120					
6.15	26.10	6.16	·1114					
6.23	29.10	6.23	·1118					
6.35	23.55	6.33	·1089					
6.46	24.50	6.44	·1092					
7. 0	22.10	6.55	·1086					
7. 3	17.15	7. 0	·1088					
7.10	32. 0	7. 5	·1129					
7.15	29.15	7.14	·1100					
7.26	35.40	7.24	·1117					
7.45	21.20	7.32	·1084					
7.52	23. 0	7.45	·1109					
7.57	22.30	7.50	·1107					
8.16	31.30	8. 0	·1117					
8.55	33.10	8.30	·1096					
10.13	32.30	9. 3	·1096					
11.11	29. 0	9.15	·1101					
11.29	29.30		***					
11.43	40. 0	10.25	·1104					
12.15	34.20	10.40	·1100					
12.38	37.20	10.51	·1103					
	***	11.23	·1102					
13.28	34.35	11.35	·1116					
14.26	29. 0	11.52	·1117					
15.15	39.35	12.14	·1102					
16.12	30.30	12.30	·1104					
16.45	29.20	12.45	·1102					
17.45	31.15		***					
18.17	30.50	14.15	·1106					
18.42	29. 5	14.30	·1101					
19. 0	29. 0	14.55	·1084					
19.11	30.30	15.30	·1113					
19.15	27.30	16. 0:	·1114					
	***		***					
20.31	28.50	17.25	·1107					
20.43	26.30		***					
20.46	27.30	18.20	·1112					
	***		***					
21.37	29.30	19. 6	·1110					
22.52	34.10	19.14	·1101					
23. 6	36.30	19.30	·1107					
23.59	38. 5		***					
		20.25	·1102					
		20.40	·1093					
		20.45	·1098					
			***					
		21.40	·1093					
			***					
		22.20	·1078					
			***					
		23.40	·1080					
Mar.18		Mar.18		Mar.18		Mar.18		
0. 0	21.38. 5	0.15	·1074	0. 0	·02098	1. 0	55·0	56·2
0.26	38.50		***	1.52:	·01930	3. 0	57·4	57·4
0.54	42. 5	1.35	·1092	4.15	·01980	9. 0	58·0	58·5
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.18		Mar.18		Mar.18		Mar.18		
h m	° ′ ″	h m		h m		h m	°	°
2. 0	21.42. 0	1.55	·1085	6.26	{ ·01945	21. 0	50·7	52·0
2.15	41. 0		***		·02060			
2.30	41. 0	2.28	·1095	11.44	·02283			
2.57	38.30		***	15.25	·02573			
3.43	36.20	3.10	·1096	16.21	·02520			
3.52	36.20		***	22.38	·02493			
5.14	33. 0	3.40	·1088	23.59	·02397			
6. 0	31.40	4. 5	·1094					
	***		***					
7. 6	24.15	5.35	·1098					
7.24	26.30	6. 7	·1098					
8. 7	26. 0		***					
8.38	29.30	6.52	·1092					
9.13	30.30	7.16	·1100					
9.28	30. 0	7.28	·1100					
10.28	31.30	7.45	·1103					
11.11	32. 0	7.58	·1101					
11.52	33.35	8.16	·1103					
12.12	32. 0	8.30	·1100					
12.42	31.50	9. 5	·1106					
13. 7	32.30	9.30	·1101					
13.45	31.30		***					
13.54	31.30	10.45	·1105					
14.45	34.30	11.10	·1109					
14.58	34.20	11.27	·1108					
15.15	34.45	11.45	·1119					
15.40	33.20	12. 5	·1111					
15.52	33.25	12.22	·1113					
16.27	30.10	12.45	·1110					
16.54	30. 0		***					
17.31	33.30	13.55	·1116					
18.18	31.15	14.13	·1110					
19.31	30.50	14.22	·1113					
19.56	29.10	14.44	·1112					
20.38	28. 0	15.25	·1122					
22.15	32.40	16. 6	·1124					
22.33	34.30	16.25	·1124					
23. 0	34.30	17.20	·1116					
23.44	38.20	18.30	·1124					
23.59	38.30	20.30:	·1118					
		21.35	·1102					
		22.46	·1103					
			***					
		23.59	·1097					
Mar.19		Mar.19		Mar.19		Mar.19		
0. 0	21.38.30	0. 0	·1097	0. 0	·02397	1. 0	53·0	55·0
0.26	40.40		***	1.13	·02250	3. 0	55·2	57·2
0.33	39. 0	0.30	·1096	2.56	·01933	9. 0	57·5	58·5
1. 0	40.50		***	5. 0	·01964	21. 0	51·8	53·6
1.29	37.40	4.45	·1098	7.29	·01945			
1.54	40.45	5. 0	·1096	11.15	·02106			
2. 9	38.40	5.15	·1102	16.52	·02613			
2.57	36.30	6. 0	·1100	21.12	{ ·02533			
3.20	36.45	6.14	·1103		·02487			
5. 0	33.20	6.44	·1098	23. 0	·02509			
5. 9	33.40	7.29	·1107	23.59	·02413			
5.30	32.30	8.14	·1100					
			***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 19		Mar. 19						
h m	° ′ ″	h m		h m		h m	°	
6. 0	21. 32. 0	8. 24	·1104					
6. 15	30. 0		***					
6. 28	30. 0	8. 45	·1100					
6. 59	26. 30	9. 7	·1104					
8. 4	29. 30	9. 55	·1100					
8. 29	31. 30	10. 15	·1094					
9. 42	32. 10	10. 30	·1116					
10. 0	29. 55	10. 45	·1108					
10. 22	25. 0		***					
10. 43	28. 55	11. 10	·1109					
10. 52	28. 30		***					
11. 15	29. 50	12. 0	·1100					
11. 50	28. 30	12. 16	·1102					
12. 15	30. 45	12. 45	·1101					
12. 49	30. 40	13. 30:	·1107					
13. 10	31. 50		***					
13. 52	31. 0	19. 55:	·1117					
15. 50	31. 35		***					
16. 24	31. 25	21. 40	·1100					
17. 5	32. 15	21. 57	·1100					
17. 39	31. 30	22. 15	·1094					
18. 11	31. 45		***					
20. 20	27. 0	23. 59	·1095					
21. 15	31. 0							
21. 43	31. 0							
22. 21	34. 10							
23. 31	39. 30							
23. 59	40. 30							
Mar. 20		Mar. 20		Mar. 20		Mar. 20		
0. 0	21. 40. 30	0. 0	·1095	0. 0	·02413	1. 0	56 ·5	57 ·5
0. 30	40. 30		(†)	3. 0	·02028 ·02060	3. 0	58 ·0	59 ·7
0. 42	41. 40	1. 15	·1102			9. 4	58 ·0	59 ·0
3. 49	33. 40	1. 30	·1094	6. 49	·01963	21. 0	47 ·0	49 ·2
4. 18	33. 30		***	7. 7	·02007			
4. 53	31. 45	3. 0	·1094	10. 52	·02210			
6. 10	31. 30	3. 30	·1100	12. 49	·02363			
7. 28	33. 0	4. 10	·1096	14. 30	·02597			
8. 42	32. 20	4. 25	·1098	23. 59	·02406			
10. 26	32. 30	5. 8	·1095					
10. 45	30. 55	6. 0	·1100					
11. 22	25. 40	6. 20	·1096					
11. 59	30. 45	6. 45	·1099					
	***	9. 45	·1105					
12. 52:	27. 0	9. 57	·1110					
	***	10. 24	·1106					
14. 59	33. 15	10. 35	·1108					
	***		***					
17. 54	33. 0	11. 30	·1107					
18. 51	30. 15	12. 0	·1102					
19. 11	29. 35	12. 38	·1114					
19. 39	29. 40	12. 45	·1111					
19. 54	29. 0		***					
22. 0	31. 30	13. 45	·1111					
22. 12	32. 55		***					
22. 30	33. 20	15. 40	·1120					
23. 12	37. 45		***					
23. 59	38. 40	17. 35	·1120					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Mar. 20						
h m	° ′ ″	h m		h m		h m	°	°
		20. 0	·1123					
		23. 45	·1108					
		23. 59	·1105					
Mar. 21		Mar. 21		Mar. 21		Mar. 21		
0. 0	21. 38. 40	0. 0	·1105	0. 0	·02406	6. 45	55 ·[illegible]	56 ·[illegible]
0. 50	38. 30	0. 25	·1106	1. 30	·02338	21. 0	45 ·[illegible]	47 ·[illegible]
1. 15	39. 55	1. 9	·1118	4. 12	·01906			
2. 43	37. 45	2. 40	·1124	4. 44	·01928			
3. 49	33. 50	3. 22	·1124	7. 57	·01895			
4. 30	32. 40		***	11. 15:	·02024			
4. 51	31. 30	4. 0	·1118	15. 54	·02536			
5. 33	31. 25	4. 40	·1120	20. 13	·02440			
7. 47	32. 20	5. 0	·1117	23. 59	·02237			
8. 50	33. 40		***					
9. 22	31. 30	5. 55	·1119					
	***	6. 35:	·1123					
10. 30	31. 35	7. 56	·1118					
	***	8. 16	·1121					
10. 50	29. 15		***					
	***	9. 35	·1121					
11. 30	30. 10	10. 0	·1115					
	***	10. 55:	·1120					
12. 43	34. 15	11. 20	·1116					
	***	11. 55	·1118					
14. 10	33. 50	12. 50	·1124					
14. 29	31. 30	14. 10	·1129					
	***		***					
15. 33	33. 40	15. 14	·1129					
	***	17. 0:	·1136					
17. 50	31. 15		***					
18. 26	33. 20	18. 15	·1130					
18. 51	33. 20	20. 10:	·1132					
19. 11	31. 25		***					
19. 37	31. 30	23. 59	·1113					
20. 18	28. 40							
21. 8	32. 0							
21. 15	31. 20							
22. 45	36. 30							
23. 8	36. 15							
23. 45	39. 30							
23. 59	40. 0							
Mar. 22		Mar. 22		Mar. 22		Mar. 22		
0. 0	21. 40. 0	0. 0	·1113	0. 0	·02237	1. 0	50 ·8	51 ·[illegible]
0. 45	41. 0	1. 50	·1111	0. 12	·02227	3. 0	55 ·3	56 ·2
1. 30	41. 0	2. 15	·1117	0. 18	·02153	9. 0	58 ·0	58 ·2
2. 0	40. 0	2. 55	·1117	1. 55	·01865	21. 0	47 ·0	49 ·3
2. 15	40. 25	2. 31	·1111	2. 42	·01930 ·02123			
2. 47	39. 30		***					
3. 22	37. 20	4. 8	·1113	3. 54	·02080			
4. 12	35. 0	4. 40	·1122	11. 5	·02350			
4. 30	34. 50	5. 30	·1119	13. 37	·02628			
6. 7	31. 0	5. 45	·1112	17. 57	·02530			
6. 20	26. 50	6. 7	·1108	20. 15	·02530			
6. 45	29. 30	6. 15	·1118	23. 59	·02372			
7. 6	27. 0	6. 30	·1118					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar.22		Mar.22						
h m	° ′ ″	h m		h m		h m	°	°
7. 12	21. 28. 20	6. 47	·1104					
7. 18	28. 10		***					
7. 29	29. 50	8. 50	·1104					
	***	9. 7	·1114					
8. 29	30. 50	9. 30	·1114					
9. 0	27. 30	9. 55	·1110					
9. 14	27. 30		***					
9. 21	27. 0	11. 0	·1122					
9. 52	29. 15		***					
11. 53	33. 0	12. 30	·1129					
12. 14	31. 0	13. 55	·1124					
12. 44	30. 5	14. 40	·1127					
15. 0	31. 20		***					
15. 52:	33. 30	15. 45	·1124					
17. 12	32. 0	16. 2	·1127					
17. 35	32. 55	16. 25	·1126					
18. 5	30. 45	17. 7	·1134					
18. 51	30. 30		***					
19. 12	28. 55	18. 10	·1138					
19. 15	29. 15		***					
19. 23	28. 0	20. 10	·1132					
20. 15	28. 55	21. 30	·1124					
20. 29	27. 50	21. 45	·1116					
21. 17	29. 10		***					
23. 22	38. 10	23. 0	·1118					
23. 42	38. 10		***					
23. 59	39. 15	23. 59	·1125					
Mar.23		Mar.23		Mar.23		Mar.23		
0. 0	21. 39. 15	0. 4	·1125	0. 0	·02372	1. 0	51 ·7	54 ·0
0. 24	41. 20	0. 27	·1130	0. 15	·02349	3. 0	55 ·0	57 ·0
1. 52	40. 30		***		(†)	9. 0	60 ·7	61 ·0
3. 30	37. 10	2. 0	·1134	1. 0	·02106*	21. 0	51 ·4	53 ·6
3. 50	36. 55		***	1. 28	·02034			
4. 25	34. 30	3. 27	·1124	1. 58	·02037			
6. 43	33. 0	4. 10	·1124	2. 55	{ ·02120 ·02250			
7. 39	28. 0	4. 30	·1119					
8. 41	32. 5	5. 15	·1124	3. 28	·02179			
9. 10	31. 5	6. 30	·1126	4. 52	·02166			
10. 10	31. 0		***	7. 11	·02098			
10. 27	27. 20	7. 20	·1125	9. 26	·02156			
11. 11	31. 30	7. 45	·1129	9. 52	·02193			
	***	8. 2	·1124	10. 30	·02207			
11. 30	30. 10	8. 30	·1126	13. 55	·02457			
	***	8. 45	·1130	17. 51	·02344			
12. 25	32. 25	9. 0	·1127	21. 0	·02310			
	***	9. 30	·1131	22. 15	·02250			
16. 0	30. 0	9. 45	·1124	23. 45	·02130			
	***		***					
18. 9	31. 30	10. 10	·1126					
	***	10. 25	·1135					
18. 44	30. 40	10. 30	·1130					
	***	10. 43	·1130					
18. 58	31. 30	10. 50	·1138					
	***	10. 55	·1136					
20. 45	31. 0		***					
20. 52	34. 45	11. 20	·1141					
20. 58	33. 40		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar.23		Mar.23						
h m	° ′ ″	h m		h m		h m	°	°
21. 22	21. 34. 30	12. 0	·1124					
21. 40	33. 20	12. 20	·1131					
	***	12. 30	·1127					
22. 30	33. 40	12. 46	·1128					
23. 55	38. 0	12. 55	·1132					
23. 59	37. 50		***					
		15. 0	·1132					
			***					
		16. 45	·1134					
		17. 25	·1138					
		17. 55	·1136					
		18. 45:	·1138					
			***					
		20. 30	·1130					
		20. 55	·1116					
		21. 25	·1120					
			***					
		23. 59	·1108					
Mar.24		Mar.24		Mar.24		Mar.24		
0. 0	21. 37. 50	0. 0	·1108	0. 11	·02137	1. 0	57 ·0	58 ·5
	***	0. 15	·1108	0. 43	·02076	3. 0	60 ·8	61 ·8
0. 44	40. 0	0. 23	·1112	0. 56	·02094	9. 0	63 ·1	64 ·6
1. 42	37. 30	0. 40	·1106	1. 30	·01982	21. 0	52 ·4	53 ·6
1. 52	37. 50	0. 47	·1112	2. 52	·02090			
4. 12	33. 30		***		***			
5. 36	31. 40	1. 20	·1098	4. 34	·02180			
6. 33	31. 40	1. 53	·1106	5. 52:	·02238			
7. 44	30. 45		***	7. 45	·02180			
10. 6	31. 30	2. 30	·1107	10. 54	·02230			
10. 52	29. 25		***	12. 7	·02294			
11. 4	28. 50	4. 15	·1100	13. 7	·02390			
11. 29	30. 45	6. 15	·1120	17. 28	·02290			
11. 53	30. 30	8. 0	·1119	18. 41	·02273			
12. 37	28. 5	11. 8	·1124	23. 59	·02190			
12. 44	28. 30	11. 45	·1129					
13. 7	27. 15	11. 55	·1136					
13. 39	28. 45		***					
14. 15	27. 30	12. 55	·1138					
14. 51	29. 0	13. 25	·1134					
	***	14. 5	·1140					
15. 52	29. 25	14. 15	·1136					
16. 9	28. 30		***					
	***	16. 40	·1151					
17. 40	30. 0		***					
	***	19. 10	·1152					
18. 39	27. 30	19. 40	·1148					
	***		***					
19. 10	29. 25	23. 59	·1136					
	***							
19. 30	28. 30							
	***							
20. 53	28. 35							
22. 58	31. 30							
23. 33	33. 45							
23. 40	33. 0							
23. 59	33. 50							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
Mar.25	
h m	° ′ ″
0. 0	21. 33. 50
0. 34	35. 55
1. 44	36. 40
1. 52	36. 10
2. 0	37. 0
2. 45	34. 10
3. 45	34. 30
4. 23	34. 0
4. 51	34. 30
5. 39:	32. 55
6. 22	33. 20
6. 30	32. 20
7. 10	35. 0
7. 57	33. 15
8. 14	33. 30
8. 39	33. 10
9. 0	33. 30
9. 57	32. 0
11. 1	32. 55
11. 30	32. 0
13. 13	33. 20
13. 39	33. 0
13. 51	33. 30
14. 12	33. 30
14. 37	35. 5
14. 46	35. 5
15. 10	39. 0
15. 44	30. 0
16. 16	31. 10
16. 46	30. 0
17. 12	30. 50
18. 39	30. 30
19. 30	28. 0
21. 26	30. 30
23. 0	36. 0
23. 26	38. 50
23. 44	38. 45
23. 54	40. 0
Mar.26	
0. 5	21. 40. 20
1. 25	40. 20
2. 39	37. 5
3. 0	36. 50
3. 44	34. 30
4. 48	33. 0
5. 4	33. 15
5. 30	31. 45
7. 7	30. 30
7. 40	30. 35
8. 15	31. 25
10. 45	32. 0
11. 6	33. 0
13. 6	31. 10
13. 26	31. 50
14. 28	28. 45
15. 35	31. 10
17. 21	31. 45
18. 29	21. 31. 0
19. 58	28. 10
20. 11	28. 40
20. 26	28. 30
21. 0	29. 30
21. 45	34. 35
22. 59	40. 15
23. 33	39. 0
23. 59	39. 30
Mar.27	
0. 0	21. 39. 30
0. 15	41. 30
0. 39	40. 0
1. 39	39. 25
1. 54	40. 0
2. 56	37. 0
3. 45	35. 55
3. 53	34. 20
4. 7	35. 10
4. 21	33. 50
5. 0	33. 45
5. 45	32. 50
6. 57	32. 0
7. 16	32. 40
8. 0	32. 0
8. 23	32. 10
10. 19	31. 50
10. 29	32. 30
10. 38	31. 50
10. 45	31. 45
11. 29	30. 40
11. 41	31. 40
12. 51	30. 50
13. 26	31. 10
14. 12	30. 50
14. 25	30. 0
14. 51	30. 15
15. 0	31. 0
15. 13	29. 30
15. 22	30. 50
16. 0	30. 20
16. 45	31. 0
17. 44	30. 5
18. 10	26. 40
18. 45	27. 0
19. 40	38. 20
20. 25	40. 0
20. 45	38. 15
21. 6	39. 35
21. 43	37. 30
	(†)
22. 40	41. 10
23. 24	46. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Mar.25	
h m	
0. 0	·1136
0. 48	·1144
	***
2. 0	·1147
2. 35	·1141
3. 15:	·1148
	***
4. 15	·1148
4. 43	·1156
5. 5	·1146
5. 35	·1144
5. 55	·1147
6. 5	·1144
6. 26	·1156
6. 50	·1156
7. 13	·1148
7. 35	·1148
8. 0	·1156
	***
9. 0	·1162
9. 29	·1159
9. 55	·1164
	***
13. 54	·1169
	***
14. 35	·1164
15. 15:	·1178
16. 10	·1168
18. 45:	·1174
21. 55	·1151
	***
23. 14	·1152
23. 40	·1162
23. 55	·1157
Mar.26	
0. 0	·1159
	***
1. 51	·1160
1. 55	·1154
2. 30	·1154
2. 45	·1161
	***
3. 45	·1154
4. 40	·1156
5. 18	·1161
5. 40	·1156
6. 12	·1154
6. 40	·1162
7. 15	·1153
8. 2	·1160
	***
9. 30	·1160
	***
11. 0	·1171
	***
13. 6	·1169
13. 40	·1174
	***
15. 55	·1169
18. 5	·1174
18. 55:	·1172
	***
21. 45	·1152
	***
22. 50	·1157
23. 59	·1148
Mar.27	
0. 0	·1148
0. 30	·1164
0. 45	·1160
1. 25	·1161
1. 43	·1158
2. 0	·1158
	***
2. 47	·1148
	***
4. 5	·1161
4. 40	·1155
	***
5. 12	·1161
	***
6. 5	·1152
6. 45	·1158
7. 0	·1154
	***
9. 35	·1152
10. 20	·1156
10. 23	·1169
10. 29	·1161
	***
11. 30	·1158
12. 10	·1161
12. 35	·1155
	***
13. 9	·1161
13. 20	·1167
13. 25	·1162
	***
14. 5	·1170
	***
14. 38	·1166
14. 45	·1176
14. 55	·1161
15. 20	·1166
16. 15	·1161
	***
17. 50	·1163
18. 25	·1146
18. 45	·1123
19. 10	·1124

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Mar.25	
h m	
0. 0	·02190
1. 54	·02196
6. 52:	·01924
12. 16	·02238
14. 7	·02190 ·02130
15. 22	·02157
15. 56	·02130
16. 27	·02150
19. 56	·02158
22. 45	·02078
23. 59	·02133
Mar.26	
0. 0	·02133
1. 32	·02067
2. 40	·01974
3. 40	·01824
4. 43	·01887
8. 39	·01810
12. 22:	·01864
16. 7	·02246
19. 50	·02180
23. 59	·02130
Mar.27	
0. 0	·02130
1. 22	·02137
2. 51	·01986
3. 15	·01984
3. 58	·01830
8. 19	·01760
14. 36:	·01837
20. 11	·02256
21. 30	·02216
23. 59	·02250

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
Mar.25		
h m	°	°
1. 0	55 ·0	55 ·0
3. 0	56 ·0	56 ·7
9. 0	54 ·0	55 ·4
21. 0	46 ·0	47 ·6
Mar.26		
1. 0	49 ·2	50 ·4
3. 0	53 ·0	53 ·6
9. 0	56 ·0	56 ·7
21. 0	46 ·5	48 ·3
Mar.27		
1. 0	49 ·5	50 ·5
3. 0	53 ·2	54 ·0
9. 0	55 ·5	55 ·5
22. 30	51 ·0	52 ·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.27		Mar.27						
h m	° ′ ″	h m		h m		h m	°	°
23. 59	21. 44. 40	19. 30	·1135					
		19. 50	·1135					
		20. 0	·1128					
		20. 10	·1128					
		20. 30	·1133					
			***					
		23. 20	·1128					
			***					
		23. 59	·1134					
Mar.28		Mar.28		Mar.28		Mar.28		
0. 0	21. 44. 40	0. 0	·1134	0. 0	·02250	9. 0	56 ·0	56 ·0
0. 33	43. 45	0. 28	·1139	1. 32:	·02210	21. 0	49 ·4	50 ·3
0. 42	42. 10	0. 35	·1136	4. 50	·01840			
0. 51	43. 40	0. 45	·1148	6. 29	{ ·01836			
1. 15	41. 15	1. 10	·1134		·01917			
1. 40	41. 0		***	9. 54	·01910			
2. 0	41. 15	1. 45	·1140	14. 54	·02275			
2. 12	42. 0	2. 0	·1139	17. 6	·02238			
2. 28	40. 55	2. 8	·1146	17. 43	·02190			
3. 27	38. 15	2. 15	·1138	18. 4	·02217			
3. 40	38. 15		***	18. 37	·02080			
4. 22	35. 10	3. 25	·1139	19. 7	·02118			
5. 23	33. 45	3. 40	·1148	19. 30	·02176			
6. 10	32. 40	4. 0	·1144	20. 12	·02086			
7. 10	32. 45	4. 10	·1148	20. 43	·02160			
8. 54	33. 30	4. 20	·1136	21. 14	·02150			
10. 0	32. 40	4. 35	·1141		***			
12. 44	31. 15		***	23. 59	·02282			
14. 11	31. 45	6. 5	·1141					
14. 36	31. 10	6. 17	·1146					
15. 54	32. 10	6. 35	·1142					
16. 14	32. 0	7. 27	·1143					
16. 40	32. 45	7. 37	·1149					
16. 54	32. 10	7. 50	·1145					
17. 30	39. 20	8. 7	·1146					
17. 40	38. 55	8. 15	·1141					
17. 54	43. 10		***					
18. 6	41. 0	8. 44	·1150					
18. 15	53. 50	9. 30	·1145					
18. 35	54. 0		***					
19. 11	37. 35	10. 30	·1154					
19. 23	40. 55		***					
19. 31	40. 40	12. 55	·1154					
19. 40	33. 40		***					
20. 0	51. 0	14. 30	·1156					
20. 12	50. 20		***					
20. 45	34. 45	15. 55	·1166					
21. 3	35. 5		***					
21. 15	46. 5	16. 43	·1164					
21. 32	42. 0		***					
21. 40	45. 50	17. 14	·1172					
21. 49	43. 0	17. 40	·1150					
	(†)	18. 0	·1112					
		18. 8	·1116					
		18. 14	·1112					
		18. 30	·1123					
		19. 0	·1069					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Mar.28						
h m	° ′ ″	h m		h m		h m	°	°
		19. 14	·1072					
		19. 27	·1061					
		19. 55	·1126					
		20. 0	·1124					
		20. 15	·1132					
		20. 44	·1085					
		21. 8	·1112					
		21. 25	·1098					
		21. 35	·1108					
		21. 55	·1094					
		22. 2	·1102					
		22. 10	·1091					
		22. 16	·1102					
			***					
		23. 25	·1078					
			***					
		23. 59	·1087					
Mar.29		Mar.29		Mar.29		Mar.29		
	(†)	0. 0	·1087	0. 0	·02282	1. 0	54 ·6	54 ·8
1. 0	21. 42. 5	0. 15	·1097	1. 50	·02150	3. 0	58 ·0	58 ·0
1. 39	39. 30	0. 35	·1092	2. 30	·01990	9. 0	58 ·8	60 ·2
1. 54	41. 0	1. 0	·1094		***	21. 0	48 ·7	51 ·0
2. 16	38. 20	1. 15	·1100	3. 14	·02038			
2. 29	39. 55	1. 45	·1094	3. 27	·02086			
2. 40	38. 0	2. 5	·1114	4. 6	·02065			
2. 47	40. 5	2. 10	·1102	4. 26	·02130			
3. 8	40. 40	2. 25	·1102	4. 52	·02090			
3. 15	38. 30	2. 30	·1106	5. 55	·02184			
3. 27	40. 40	2. 45	·1086	7. 11	·02106			
3. 44	35. 30	2. 55	·1100		***			
4. 9	33. 30	3. 7	·1088	9. 29	·02070			
4. 26	36. 30	3. 10	·1092	12. 11	·02368			
	***	3. 20	·1083	13. 0	·02306			
5. 0	33. 30	3. 32	·1104	14. 54	·02300			
5. 23	34. 0	3. 45	·1100	16. 25	·02257			
5. 51	27. 0	4. 29	·1128	16. 45	·02190			
6. 10	26. 20	4. 46	·1101	17. 44	·02240			
6. 22	28. 5	5. 5	·1112	20. 4	·02240			
6. 52	29. 50		***	22. 13	·02197			
7. 22	25. 10	5. 30	·1120	23. 59	·02035			
7. 35	26. 0	5. 46	·1105					
7. 42	31. 50	6. 8	·1097					
8. 22	22. 55		***					
8. 34	11. 15	6. 55	·1119					
8. 52	23. 45	7. 7	·1111					
9. 10	21. 0	7. 20	·1111					
9. 21	28. 25	7. 40	·1128					
	***	8. 0	·1108					
9. 52	22. 50	8. 15	·1122					
10. 22	31. 40	8. 25	·1116					
10. 40	29. 10	8. 45	·1148					
10. 54	31. 15	8. 47	·1138					
11. 9	28. 15	9. 10	·1152					
11. 30	35. 50	9. 21	·1132					
11. 39	33. 40	9. 36	·1132					
12. 4	36. 35	9. 50	·1138					
	***		***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 29		Mar. 29						
h m	° ′ ″	h m		h m		h m	°	°
13. 20	21. 36. 50	10. 35	·1142					
	***		***					
14. 20	31. 0	11. 14	·1137					
	***	11. 45	·1144					
15. 38	31. 0		***					
16. 8	46. 0	12. 30	·1140					
16. 56	32. 30	13. 0	·1149					
	***	13. 20	·1143					
18. 42	28. 30		***					
18. 51	31. 40	14. 10	·1155					
18. 58	29. 30	14. 30	·1149					
19. 4	30. 15	14. 50	·1153					
19. 13	28. 45		***					
19. 32	32. 0	15. 40	·1154					
19. 40	31. 55	16. 0	·1131					
19. 50	34. 30		***					
20. 11	31. 30	17. 45	·1161					
20. 23	34. 30		***					
20. 40	32. 15	18. 38	·1160					
20. 50	33. 5	18. 46	·1164					
20. 57	32. 0	19. 40	·1146					
21. 16	35. 0	20. 10	·1146					
21. 45	33. 45	20. 30	·1135					
22. 30	36. 55	21. 6	·1142					
22. 37	36. 0	21. 42	·1133					
22. 45	37. 30	21. 55	·1138					
23. 26	41. 0		***					
23. 50	41. 20	22. 50	·1132					
23. 59	43. 0		***					
		23. 55	·1138					
Mar. 30		Mar. 30		Mar. 30		Mar. 30		
0. 0	21. 43. 0	0. 0	·1146	0. 0	·02035	1. 0	54 ·0	55 ·0
0. 30	44. 30	0. 42	·1141	0. 25	·02025	3. 0	54 ·0	56 ·0
1. 11	43. 55	1. 0	·1126	1. 55	·01864	9. 0	58 ·0	58 ·5
1. 41	37. 30	1. 32	·1128	2. 30	·01904	21. 0	53 ·1	54 ·2
2. 4	41. 0	1. 45	·1147	3. 22	·01896			
2. 58	39. 5	1. 57	·1156	5. 21	·01940			
3. 26	38. 30	2. 14	·1152	7. 13	·01870			
3. 29	39. 15	2. 24	·1156	9. 49	·01878			
4. 15	36. 40	2. 45	·1151	11. 40	·01978			
4. 50	30. 35	3. 15	·1152	12. 18	·01965			
5. 14	28. 45	3. 30	·1158	17. 21	·02357			
5. 50	32. 0	4. 20	·1143	23. 59	·02220			
6. 4	32. 5	5. 0	·1144					
6. 12	32. 55	5. 17	·1155					
6. 44	32. 30		***					
7. 2	32. 50	6. 10	·1146					
7. 25	32. 0	6. 30	·1147					
7. 56	33. 30	7. 0	·1142					
8. 28	31. 5	7. 40	·1146					
9. 53	33. 15	7. 51	·1144					
10. 47	31. 55	8. 35	·1144					
11. 38	36. 10	9. 0	·1150					
11. 45	40. 50	9. 10	·1154					
11. 57	38. 50	9. 20	·1151					
12. 5	39. 55		***					
12. 37	34. 10	10. 15	·1156					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 30		Mar. 30						
h m	° ′ ″	h m		h m		h m	°	
12. 52	21. 37. 55	10. 40	·1152					
13. 13	34. 55	11. 30	·1153					
13. 32	35. 40	11. 38	·1164					
14. 40	32. 30	11. 45	·1162					
14. 57	35. 0	11. 58	·1166					
15. 42	34. 0	12. 10	·1159					
16. 30	33. 30	12. 35	·1158					
17. 28	35. 0	12. 50	·1147					
17. 51	37. 55	13. 7	·1153					
18. 11	35. 15	13. 13	·1152					
18. 22	36. 55	13. 24	·1155					
18. 50	36. 50	13. 40	·1152					
19. 9	37. 30	14. 20	·1160					
19. 54	31. 0	15. 2	·1154					
20. 7	31. 10	15. 15	·1161					
20. 19	30. 30	15. 35	·1160					
20. 54	30. 25	15. 38	·1156					
21. 46	32. 10	15. 40	·1160					
22. 53	37. 15	15. 44	·1158					
23. 10	37. 0	17. 3	·1161					
23. 59	39. 15	17. 10	·1165					
		17. 30	·1160					
		17. 36	·1164					
		17. 44	·1160					
		17. 45	·1164					
		17. 50	·1156					
		18. 2	·1152					
		18. 54	·1162					
			***					
		20. 6	·1148					
			***					
		22. 0	·1132					
			***					
		23. 59	·1127					
Mar. 31		Mar. 31		Mar. 31		Mar. 31		
0. 0	21. 39. 15	0. 25	·1127	0. 0	·02220	1. 0	55 ·5	55 ·8
0. 27	39. 30	0. 35	·1132	3. 56	·02063	3. 0	57 ·0	57 ·0
0. 36	39. 10	0. 45	·1128	6. 58	·02011	9. 0	56 ·0	57 ·0
0. 44	40. 55	0. 55	·1134	9. 6	·02030	21. 0	51 ·2	53 ·2
0. 57	40. 30		***	12. 44	·02223			
1. 58	41. 25	2. 25	·1136	12. 50	·02170			
2. 36	39. 40	3. 0	·1147	15. 0	·02170			
2. 45	40. 20	3. 30	·1142	17. 15	·02122			
4. 12	36. 10	4. 0	·1142	20. 30	·02150			
	***	4. 15	·1147	23. 59	·02158			
6. 0	33. 50	4. 22	·1144					
6. 39	31. 55	4. 35	·1151					
7. 12	31. 30	4. 49	·1138					
7. 44	34. 0	5. 0	·1144					
	***	5. 16	·1145					
8. 15	33. 5	5. 29	·1138					
	***	5. 50	·1145					
10. 52	33. 30	6. 15	·1136					
	***	6. 32	·1133					
11. 54	31. 35	7. 8	·1139					
	***	7. 43	·1148					
13. 0	35. 5	8. 10	·1147					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.31		Mar.31						
h m	° ′ ″	h m		h m		h m	°	°
13. 26	21. 32. 40	8. 15	·1152					
13. 40	32. 30	8. 40	·1149					
14. 0	29. 50	9. 15	·1150					
	***	9. 25	·1156					
15. 21	37. 25	9. 45	·1152					
16. 0	34. 30		***					
16. 27	37. 10	10. 8	·1150					
16. 45	36. 30	10. 45	·1161					
	***	11. 5	·1154					
17. 26	36. 5	11. 25	·1154					
17. 33	37. 0		***					
18. 30	32. 0	11. 55	·1159					
	***	12. 13	·1154					
20. 30	29. 10	12. 30	·1156					
22. 0	30. 50	12. 50	·1164					
	***	13. 10	·1158					
23. 30	39. 40		***					
23. 59	39. 30	13. 55	·1160					
		14. 7	·1155					
			***					
		15. 0	·1156					
			***					
		15. 35	·1152					
			***					
		16. 30	·1164					
			***					
		17. 25	·1148					
		17. 45	·1156					
			***					
		18. 41	·1160					
			***					
		19. 15	·1148					
			***					
		21. 43	·1129					
			***					
		23. 30	·1124					
		23. 59	·1113					
Apr. 1		Apr. 1		Apr. 1		Apr. 1		
0. 0	21. 39. 30	0. 2	·1110	0. 0	·02158	1. 0	52 ·4	52 ·8
0. 12	43. 25	0. 40	·1112	2. 30⸵	·02206	3. 0	52 ·9	53 ·2
0. 31	42. 35	1. 10	·1126	6. 11⸵	·02100	9. 0	50 ·8	51 ·6
1. 15	43. 20	1. 43	·1119	9. 56	·02253	21. 43	40 ·5	43 ·0
1. 28	42. 35	1. 50	·1124	11. 11	·02220			
1. 50	43. 0		***	11. 15	·02168			
	***	2. 10	·1119	12. 53	·02186			
3. 23	37. 50	2. 18	·1125	15. 19	·02096			
3. 29	38. 10	2. 40	·1125	20. 40	·02110			
3. 45	36. 45	2. 53	·1131	23. 59	·02038			
5. 9	33. 20	3. 20	·1126					
	***	3. 25	·1133					
6. 14	32. 45	3. 40	·1129					
	***	4. 24	·1132					
8. 53	32. 15	4. 35	·1129					
9. 8	31. 0	4. 48	·1133					
9. 13	32. 40	5. 0	·1128					
9. 39	29. 50		***					
10. 11	29. 45	7. 25	·1138					
	***		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 1		Apr. 1						
h m	° ′ ″	h m		h m		h m	°	°
10. 30	21. 31. 50	9. 0	·1134					
11. 0	28. 30	9. 13	·1141					
	***	9. 26	·1137					
11. 30	31. 40	9. 48	·1142					
	***	10. 7	·1136					
11. 57	32. 30	10. 35	·1146					
	***	11. 0	·1145					
12. 17	31. 10	11. 15	·1140					
	***		***					
13. 40	35. 0	12. 12	·1146					
	***	12. 25	·1140					
14. 26	35. 35	12. 50	·1146					
14. 44	41. 40	12. 55	·1142					
15. 5	37. 30	13. 40	·1144					
	***	14. 0	·1150					
15. 41	35. 0	14. 26	·1147					
	***	14. 55	·1134					
16. 11	33. 0	15. 10	·1145					
	***		***					
18. 30	33. 30	15. 55	·1154					
19. 45	29. 30	16. 25	·1148					
	***	16. 44	·1154					
21. 10	30. 0	17. 45	·1148					
22. 22	35. 40	17. 53	·1158					
22. 30	34. 30	17. 56	·1150					
22. 52	37. 30	18. 24	·1156					
23. 14	36. 50		***					
23. 40	41. 20	19. 10	·1148					
23. 59	41. 0		***					
		21. 25	·1138					
		21. 56	·1125					
			***					
		22. 47	·1136					
		23. 0	·1129					
		23. 30	·1134					
		23. 56	·1131					
Apr. 2		Apr. 2		Apr. 2		Apr. 2		
0. 0	21. 41. 5	0. 0	·1142	0. 0	·02038	7. 0	44 ·5	46 ·0
0. 14	43. 20	0. 40	·1134	1. 17	·02030	21. 0	45 ·8	48 ·0
0. 39	43. 0	0. 57	·1134	1. 52	·02050			
0. 51	44. 45	1. 22	·1124	4. 7	·01976			
1. 40	40. 35	1. 30	·1135	4. 30	·01995			
1. 53	42. 0		***	7. 0	·01840			
2. 11	40. 5	2. 12	·1143	9. 56	·01780			
3. 9	38. 30	2. 35	·1156	11. 11	·01778			
3. 27	39. 5	3. 0	·1156	11. 40	·01707			
4. 11	36. 45	3. 25	·1168	14. 4	·01763			
4. 42	20. 50	3. 45	·1168	19. 22	·01817			
4. 50	21. 50	4. 16	·1143	21. 17	·01642			
4. 59	21. 50	4. 42	·1183	23. 59	·01738			
5. 22	28. 0	4. 48	·1177					
6. 10	33. 20	4. 58	·1187					
6. 28	33. 10		***					
6. 39	33. 40	5. 15	·1159					
7. 0	33. 0	5. 25	·1161					
7. 23	33. 25	5. 30	·1152					
7. 45	31. 45	5. 40	·1155					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⸵ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
Apr. 2	
h m	° ′ ″
8. 9	21. 31. 25
9. 11	25. 0
9. 44	31. 25
10. 31	31. 30
10. 36	33. 0
10. 44	32. 0
10. 58	37. 0
11. 29	23. 55
11. 59	28. 0
12. 22	27. 30
12. 39	29. 0
12. 57	28. 20
13. 10	29. 25
13. 21	31. 0
13. 37	30. 50
	***
14. 12	33. 20
14. 32	31. 40
14. 42	33. 0
15. 0	32. 0
15. 18	33. 20
15. 26	32. 10
15. 36	33. 15
15. 51	31. 40
15. 58	33. 25
16. 21	32. 25
16. 29	32. 55
16. 44	32. 0
16. 58	32. 45
17. 8	31. 15
17. 23	33. 50
17. 45	33. 40
18. 21	31. 45
18. 27	32. 15
	***
19. 30	30. 40
19. 51	32. 50
20. 42:	29. 10
22. 12	35. 15
22. 44	35. 0
23. 59	37. 45
Apr. 3	
0. 0	21. 37. 45
0. 40	40. 0
	***
2. 6	41. 40
2. 30	39. 20
2. 40	39. 55
3. 12	38. 40
3. 27	39. 25
3. 52	36. 30
	***
5. 45	31. 15
6. 9	31. 50
	(†)
9. 1	29. 10
9. 15	30. 0
Apr. 3	
h m	° ′ ″
9. 26	21. 29. 10
9. 52	30. 0
10. 7	33. 30
10. 14	31. 55
10. 20	32. 45
10. 29	31. 30
10. 42	33. 25
11. 0	28. 30
11. 28	30. 15
12. 19	31. 10
12. 55	33. 20
	***
13. 44	32. 30
14. 12	36. 0
15. 36	32. 0
16. 22	33. 45
	***
17. 10	31. 30
17. 29	32. 25
18. 6	31. 15
18. 14	31. 50
	***
18. 51	31. 10
	***
19. 0	31. 30
	***
19. 45	29. 30
	***
19. 57	30. 0
	***
20. 30	29. 0
	***
21. 49	29. 30
22. 11	34. 30
22. 15	33. 30
22. 30	36. 30
23. 10	37. 30
23. 15	39. 0
23. 59	40. 30
Apr. 4	
0. 0	21. 40. 30
1. 15	41. 50
2. 44	39. 0
2. 57	39. 45
3. 39	36. 20
3. 44	36. 25
	***
4. 44	33. 30
	***
6. 35	32. 15
6. 47	30. 50
7. 6	31. 30
7. 44	28. 45
8. 4	29. 20
8. 25	27. 45
8. 56	29. 25
9. 14	27. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Apr. 2	
h m	
6. 5	·1149
6. 30	·1158
6. 41	·1154
7. 25:	·1158
	***
8. 25	·1152
8. 44	·1156
9. 3	·1168
9. 25	·1161
9. 54	·1159
10. 30	·1151
10. 44	·1157
10. 53	·1155
11. 26	·1178
11. 40	·1165
11. 56	·1177
12. 40	·1151
	***
13. 15	·1146
13. 28	·1150
13. 40	·1146
	***
14. 26	·1150
14. 40	·1147
14. 59	·1154
15. 8	·1151
15. 51	·1156
16. 4	·1153
16. 28	·1159
16. 53	·1158
17. 11	·1150
17. 20	·1154
17. 47	·1151
	***
20. 0	·1152
	***
22. 5	·1133
22. 40	·1117
23. 59	·1117
Apr. 3	
0. 0	·1117
0. 30	·1118
	***
1. 31	·1122
	***
2. 31	·1116
3. 0	·1126
3. 15	·1119
3. 30	·1128
3. 58	·1112
4. 6	·1117
4. 17	·1112
4. 34	·1116
5. 5	·1110
5. 40	·1125
	(†)
Apr. 3	
h m	
9. 0	·1124
9. 52	·1122
10. 6	·1138
10. 16	·1130
10. 25	·1136
10. 35	·1135
10. 45	·1148
11. 10	·1128
11. 25	·1132
11. 37	·1122
11. 45	·1126
12. 9	·1122
	***
13. 16	·1129
	***
14. 10:	·1124
	***
15. 20	·1130
15. 45	·1126
16. 25	·1134
	***
17. 58	·1128
18. 15	·1133
18. 17	·1129
19. 0	·1132
	***
21. 40	·1115
	***
23. 59	·1106
Apr. 4	
0. 0	·1106
	***
2. 23	·1112
3. 0	·1120
3. 40	·1112
4. 35	·1125
	***
5. 11	·1100
	***
7. 10	·1120
7. 30	·1110
7. 54	·1115
7. 58	·1112
	***
9. 35	·1128
9. 47	·1120
10. 15	·1120

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Apr. 3	
0. 0	·01738
1. 11	·01794
2. 44	·01950
4. 0	·01900
	(†)
9. 1	·02010
10. 6	·02077
11. 12	·02067
14. 30	·02175
18. 12	·02418
22. 23	·02378
23. 59	·02411
h m	
Apr. 4	
0. 0	·02411
2. 28	·02377
4. 29	·02286
7. 50:	·02160
12. 26	·02363
20. 0	·02280
22. 45	·02233
23. 59	·02222

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Apr. 3		
1. 0	52·2	53·4
3. 0	55·7	57·2
9. 0	56·2	57·2
22. 18	52·3	54·2
h m		
Apr. 4		
9. 37	54·0	55·8
21. 0	46·0	48·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 4		Apr. 4						
h m	° ′ ″	h m		h m		h m	°	°
9. 38	21. 29. 10	10. 40	·1125					
10. 51	29. 0	10. 55	·1120					
11. 7	27. 0	11. 9	·1126					
11. 22	29. 5	11. 30	·1152					
11. 28	27. 45	12. 7	·1126					
11. 57	31. 50	12. 30	·1130					
12. 9	32. 20	12. 56	·1124					
12. 15	31. 10	14. 0	·1129					
12. 33	32. 0		***					
14. 12	31. 30	14. 49	·1127					
14. 52	32. 30	15. 33	·1127					
	***	18. 15:	·1135					
15. 43	31. 40	19. 30	·1127					
	***	19. 50	·1129					
17. 13	31. 30	21. 22	·1119					
	***	22. 10	·1111					
18. 54	28. 30	22. 25	·1116					
19. 10	29. 10	23. 15	·1098					
19. 30	27. 0	23. 59	·1100					
19. 46	28. 15							
20. 40:	26. 10							
22. 12	28. 40							
22. 54	33. 10							
23. 16	34. 30							
	(†)							
Apr. 5		Apr. 5		Apr. 5		Apr. 5		
	(†)	0. 0	·1100	0. 0	·02222	1. 0	49 ·8	50 ·3
0. 15	21. 39. 20	1. 34	·1105	1. 40:	·02220	3. 0	52 ·0	52 ·0
0. 30	38. 50	1. 50	·1103	8. 15:	·01743	9. 0	52 ·2	52 ·3
1. 40	41. 30	2. 25	·1108	14. 52	·01952	21. 0	47 ·0	47 ·3
2. 20	40. 20	2. 48	·1107	20. 27	·02256			
3. 19	36. 30	3. 45	·1119	22. 7	·02196			
4. 14	35. 30		***	23. 30	·02190			
6. 21	31. 0	6. 50	·1118	23. 59	·02154			
	***		***					
11. 43	31. 55	11. 46	·1128					
	***	12. 12	·1133					
12. 30	31. 0	13. 15	·1130					
13. 15	32. 30	13. 55	·1132					
13. 53	31. 30	15. 28	·1132					
	***		***					
18. 6	30. 55	18. 45:	·1133					
18. 15	30. 0		***					
18. 26	30. 0	23. 59	·1100					
18. 40	29. 15							
19. 7	30. 0							
19. 44	28. 30							
	***							
21. 15	29. 30							
22. 45	34. 20							
23. 59	37. 25							
Apr. 6		Apr. 6		Apr. 6		Apr. 6		
0. 0	21. 37. 25	0. 0	·1100	0. 0	·02154	1. 0	49 ·0	49 ·0
0. 24	37. 30	0. 30	·1112	2. 43	·02058	3. 0	51 ·0	51 ·0
0. 39	38. 50	0. 50	·1110	8. 13:	·01744	9. 0	51 ·0	52 ·0
0. 56	38. 30	2. 5	·1115	13. 2	·01800	21. 0	47 ·0	48 ·3
			***					
Apr. 6		Apr. 6		Apr. 6				
h m	° ′ ″	h m		h m		h m	°	°
1. 45	21. 39. 0	2. 42	·1126	20. 57	·02163			
	***	3. 7	·1120	21. 4	·02073			
2. 43	38. 0	4. 0	·1126	21. 43	·02086			
3. 17	35. 30	6. 53	·1122	23. 59	·02010			
4. 40	33. 10	10. 45	·1128					
6. 14	32. 0	11. 45	·1126					
7. 0	32. 30	14. 44	·1128					
9. 9	31. 45	19. 15:	·1130					
9. 39	32. 30	22. 45	·1106					
11. 10	31. 30	23. 50	·1110					
12. 12	31. 40							
17. 39	31. 5							
18. 24	30. 40							
19. 43	28. 0							
20. 42	27. 30							
21. 52	29. 10							
23. 59	36. 55							
Apr. 7		Apr. 7		Apr. 7		Apr. 7		
0. 0	21. 36. 55	0. 0	·1108	0. 0	·02010	1. 0	49 ·2	50 ·0
0. 40	38. 40	1. 16	·1108	2. 12	·01956	3. 0	50 ·0	51 ·3
2. 2	38. 40		***	4. 47	·01733	9. 0	52 ·4	53 ·0
4. 52	33. 0	4. 35	·1118	8. 41	·01708	21. 0	48 ·0	49 ·0
6. 0	31. 40	5. 35	·1118	12. 22	·01797			
9. 14	32. 30	15. 0	·1132	17. 8	·02027			
	***	19. 15:	·1131	17. 15	·01987			
17. 9	31. 35	22. 5	·1115	20. 30:	·01973			
18. 26	30. 0	23. 59	·1110	23. 59	·01827			
20. 29	26. 35							
21. 30	28. 30							
23. 59	37. 0							
Apr. 8		Apr. 8		Apr. 8		Apr. 8		
0. 0	21. 37. 0	0. 0	·1110	0. 0	·01827	1. 0	52 ·2	53 ·0
1. 13	38. 30	0. 30	·1110	1. 42	·01726	3. 0	55 ·0	54 ·0
	***	0. 55	·1116	3. 26	·01797	9. 5	53 ·6	53 ·5
4. 11	35. 0	2. 10	·1122	6. 52	·01744	21. 0	47 ·0	47 ·7
4. 21	35. 55		***	8. 53	·01808			
4. 36	34. 30	4. 15	·1122		***			
	***	4. 27	·1130	13. 45	·02155			
5. 40	33. 40	4. 40	·1126	14. 19	·02107			
	***	4. 52	·1129	15. 0	·02190			
6. 10	33. 40	5. 0	·1126	15. 42	·02148			
	***		***	19. 4	·02223			
7. 52	33. 0	5. 45	·1134	19. 11	·02164			
	***	5. 50	·1129	19. 39	·02178			
8. 58	30. 40	6. 15	·1134	22. 25	·02156			
	***	7. 6	·1136	23. 19	·02166			
11. 9	31. 30	7. 30	·1142		(†)			
	***	7. 45	·1140					
11. 32	29. 50	8. 20	·1144					
	***	8. 40	·1136					
12. 2	30. 20		***					
12. 36	26. 10	10. 30	·1144					
12. 50	28. 10	10. 43	·1139					
12. 55	26. 0	11. 0	·1140					
13. 11	21. 0	11. 13	·1148					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 8		Apr. 8						
h m	° ′ ″	h m		h m		h m	°	
13. 30	21. 20. 45	11. 21	·1144					
13. 54	28. 30	11. 40	·1152					
14. 10	28. 30	11. 55	·1150					
14. 28	22. 30	12. 20	·1139					
14. 49	23. 0	12. 40	·1138					
15. 10	27. 30	12. 48	·1140					
15. 28	24. 0	13. 7	·1150					
15. 49	20. 0	13. 43	·1139					
16. 10	18. 50	14. 0	·1139					
16. 57	28. 0	14. 25	·1149					
	***	14. 51	·1131					
17. 48	29. 0	15. 6	·1142					
18. 45	26. 0	15. 17	·1160					
19. 10	27. 0	15. 32	·1159					
	***	16. 30	·1128					
19. 45	24. 0	17. 10	·1124					
20. 9	25. 30		***					
20. 16	24. 30	18. 0	·1132					
20. 45	29. 10	18. 15	·1128					
20. 54	29. 0	18. 47	·1131					
21. 45	33. 20	19. 0	·1135					
21. 57	33. 0	19. 44	·1131					
	***	20. 0	·1135					
23. 18	36. 30	20. 30	·1131					
23. 59	38. 30	21. 25	·1117					
			***					
		22. 54	·1107					
		23. 0	·1100					
			***					
		23. 59	·1106					
Apr. 9		Apr. 9		Apr. 9		Apr. 9		
0. 0	21. 38. 30	0. 0	·1107		(†)	1. 0	49 ·0	50 ·5
0. 26	40. 0	0. 44	·1114	0. 37	·02175	3. 0	49 ·5	50 ·0
1. 2	43. 30	1. 14	·1090	1. 18	·02164	9. 0	48 ·8	49 ·5
1. 17	42. 30	1. 25	·1094	1. 40	·02183	21. 0	44 ·8	46 ·0
1. 45	49. 30	1. 42	·1120	2. 12	·02190			
2. 17	54. 0	1. 52	·1112		***			
2. 27	51. 0	2. 20	·1132	2. 55	·02330			
2. 30	52. 10	2. 29	·1126		***			
2. 39	50. 45	2. 32	·1132	3. 22	·02503			
2. 45	55. 0	2. 39	·1127	3. 30	·02806			
2. 53	49. 50	2. 50	·1146	3. 40	·02700			
2. 57	52. 55		***		(†)			
3. 2	50. 30	3. 10	·1140	4. 10	·02687			
3. 5	51. 25		***	4. 19	·03064			
3. 8	49. 30	3. 39	·1199	4. 26	·03023			
3. 14	54. 45	3. 45	·1164	4. 30	·02824			
3. 18	21. 54. 10	3. 55	·1268		(†)			
3. 30	22. 4. 35		(†)	4. 45	·02840			
	(†)	4. 14	·1276	4. 53	·03080			
4. 44	21. 52. 45	4. 20	·1312	4. 59	·02795			
4. 59	21. 42. 10	4. 28	·1282	5. 12	·02960			
5. 6	22. 0. 45	4. 40	·1312	5. 16	·02984			
5. 22	21. 29. 25		(†)	5. 27	·02560			
5. 27	40. 0	5. 10	·1208	5. 31	·02793			
5. 39	35. 0	5. 15	·1252	5. 40	·02646			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 9		Apr. 9		Apr. 9				
h m	° ′ ″	h m		h m				
5. 43	21. 49. 5	5. 19	·1235	5. 4[illegible]	·02709			
	***	5. 22	·1248	5. 45	·02652			
5. 54	48. 15	5. 25	·1209	5. 51	·02699			
5. 57	57. 0	5. 31	·1137	6. 0	[illegible]			
6. 2	21. 56. 45	5. 40	·1228	6. [illegible]	·02653			
6. 8	22. 1. 35	5. 43	·1115					
	(†)	5. 55	·1282	6. 14	·02464			
6. 23	22. 0. 50	6. 10	·1228		***			
6. 29	21. 52. 0	6. 12	·1240	6. 34	[illegible]			
6. 32	54. 0	6. 25	·1114	6. 41	·02763			
6. 43	46. 30	6. 40	·1262	6. 44	·02841			
6. 45	48. 35	7. 0	·1120	6. 53	·02673			
6. 51	41. 30	7. 7	·1198	7. 4	·02996			
6. 57	45. 0	7. 25	·1086	7. 27	·02408			
7. 21	18. 30	7. 33	·1098	7. 31	·02415			
7. 35	25. 10		***	7. 42	·02220			
7. 41	20. 0	7. 54	·1059		***			
8. 28	41. 10	8. 9	·1059	7. 56	·02153			
8. 36	40. 15	8. 20	·1074	8. 11	·02154			
8. 43	42. 0	8. 27	·1066	8. 15	·02184			
8. 47	41. 0		***	8. 38	·02120			
8. 59	44. 5	9. 2	·1054	8. 44	·02150			
9. 13	26. 15	9. 15	·1074	9. 14	·02248			
9. 32	29. 10	9. 24	·1062	9. 37	·02114			
9. 52	24. 35	9. 40	·1052		***			
10. 10	26. 10	10. 0	·1070	10. 30	·02140			
10. 15	29. 10	10. 14	·1092	10. 50	·01[illegible]			
10. 30	21. 15	10. 23	·1079	11. 0	·01936			
10. 42	26. 30	10. 42	·1101	11. 53	·01984			
10. 48	23. 30	10. 55	·1074	12. 14	·02043			
11. 6	25. 0	11. 15	·1050	12. 50	·02078			
11. 25	22. 5	11. 44	·1055	13. 0	·02056			
11. 52	25. 0	12. 0	·1049	13. 24	·02103			
12. 10	20. 10	12. 20	·1056	13. 39	·02156			
12. 23	20. 30	12. 30	·1052	14. 7	·02037			
12. 39	24. 10	12. 45	·1084	14. 22	·02076			
	***	13. 0	·1068	14. 52	·02183			
12. 54	22. 30	13. 10	·1068	17. 29	·02296			
13. 4	23. 40	13. 55	·1120	18. 22	·02296			
13. 14	19. 30	14. 11	·1100		***			
13. 25	26. 0	14. 27	·1086	19. 52	·021[illegible]			
13. 34	22. 30		***	20. 7	·02210			
13. 54	25. 30	14. 55	·1080	20. 52	·02176			
14. 0	27. 30		***	22. 0	·02184			
14. 12	26. 15	17. 25	·1098		***			
	***		***	22. 46	·02155			
14. 52	31. 20	18. 25	·1098	23. 0	·02167			
15. 15	28. 30	18. 50	·1088	23. 59	·02167			
	***	19. 0	·1088					
15. 29	30. 20	19. 27	·1052					
	***	19. 45	·1050					
15. 50	28. 55	20. 10	·1080					
15. 58	30. 20	20. 40	·1088					
16. 14	29. 10	21. 0	·1083					
	***		***					
16. 30	30. 0	21. 54	·1084					
16. 41	28. 0	22. 8	·10[illegible]					
16. 44	29. 10	22. 13	·1090					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 9		Apr. 9						
h m	° ′ ″	h m		h m		h m	°	°
17. 7	21. 28. 20	22. 18	·1098					
17. 22	28. 30	22. 22	·1090					
	***	22. 30	·1096					
18. 15	26. 50	22. 40	·1086					
18. 19	27. 35	22. 45	·1090					
18. 27	26. 30	22. 55	·1070					
	***	23. 17	·1084					
18. 52	23. 55	23. 30	·1066					
	***	23. 45	·1059					
19. 22	29. 25	23. 59	·1061					
19. 41	35. 30							
19. 54	35. 55							
20. 4	39. 0							
20. 8	37. 0							
20. 19	36. 20							
20. 22	37. 5							
20. 36	34. 30							
	***							
21. 0	33. 5							
	***							
21. 43	32. 35							
21. 51	31. 0							
	***							
22. 16	36. 10							
22. 25	35. 55							
22. 43	40. 0							
22. 55	36. 30							
23. 4	39. 30							
23. 16	38. 0							
23. 30	36. 40							
23. 44	37. 30							
23. 58	37. 40							
Apr. 10		Apr. 10		Apr. 10		Apr. 10		
0. 15	21. 47. 10	0. 5	·1063	0. 0	·02107	1. 0	49·3	49·4
0. 36	43. 15	0. 15	·1088	0. 55	·02070	3. 0	53·0	52·0
1. 27	45. 10	0. 30	·1056	1. 14	·02030	9. 0	53·2	53·4
1. 45	52. 0	0. 34	·1064	1. 51	·02173	22. 34	42·4	44·5
2. 15	41. 45	0. 44	·1048	2. 27	·02106			
2. 30	42. 40	1. 7	·1069	3. 7	·02155			
2. 39	40. 10	1. 17	·1055	3. 28	·02320			
2. 48	44. 30	1. 32	·1088	3. 58	·02175			
2. 58	41. 30	1. 45	·1073	4. 38	·02067			
3. 10	48. 0	2. 24	·1123	5. 26	·02117			
3. 14	50. 0	2. 40	·1110	5. 56	·02093			
3. 18	47. 15	2. 55	·1094	6. 43	·02163			
3. 27	53. 30		***	6. 52	·02080			
3. 38	41. 10	3. 12	·1080	7. 2	·02141			
3. 45	42. 5	3. 20	·1096	7. 22	·02053			
3. 52	40. 10	3. 25	·1092	7. 45	·02012			
3. 54	42. 20	3. 39	·1119	9. 43	·02006			
4. 16	36. 30	3. 58	·1088	10. 11	·01892			
4. 28	37. 0	4. 9	·1088	10. 17	·01933			
4. 46	40. 35	4. 23	·1094	10. 40	·01953			
5. 2	39. 20	4. 32	·1084	10. 55	·01907			
5. 12	41. 15	4. 42	·1098	11. 28	·01958			
5. 26	39. 0	5. 1	·1098	11. 45	·01933			
5. 45	35. 45	5. 10	·1092	12. 0	·01952			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 10		Apr. 10		Apr. 10				
h m	° ′ ″	h m		h m		h m	°	°
6. 16	21. 37. 35	5. 13	·1093	12. 15	·01938			
6. 19	37. 0	5. 40	·1077	12. 30	·01980			
6. 28	37. 30		***	13. 0	·01966			
6. 32	36. 0	6. 31	·1113	14. 11	·02054			
6. 45	40. 30	6. 44	·1060	14. 24	·02026			
	(†)	7. 2	·1113	15. 21	·02165			
7. 36	34. 30	7. 10	·1074	16. 0	·02177			
7. 45	23. 0	7. 24	·1116	16. 15	·02197			
8. 0	30. 30	7. 34	·1068	17. 43	·02150			
8. 10	32. 55	7. 46	·1092	19. 25	·02180			
8. 24	30. 0	7. 53	·1076	21. 0	·02166			
8. 36	32. 20		***	23. 59	·02280			
8. 47	29. 40	8. 30	·1177					
8. 59	32. 30	8. 55	·1089					
9. 3	32. 0	9. 20	·1074					
9. 12	33. 30	9. 28	·1088					
9. 15	33. 0	9. 43	·1063					
9. 27	35. 50	9. 53	·1102					
9. 33	34. 25	10. 0	·1122					
9. 41	36. 40	10. 25	·1069					
9. 52	16. 0	10. 54	·1104					
10. 0	20. 30	11. 2	·1094					
10. 22	36. 50	11. 10	·1096					
10. 39	22. 0	11. 40	·1070					
10. 51	18. 30	12. 10	·1092					
11. 1	21. 40	12. 17	·1081					
11. 40	17. 0	12. 45	·1109					
12. 0	35. 0	12. 55	·1102					
12. 11	36. 15	13. 5	·1107					
12. 45	26. 25	13. 14	·1097					
12. 53	27. 55	13. 24	·1110					
	***	13. 40	·1092					
13. 18	23. 15	13. 45	·1096					
13. 38	29. 10	14. 7	·1082					
14. 0	18. 40	14. 15	·1084					
14. 33	24. 30	14. 25	·1079					
14. 40	23. 0	14. 30	·1088					
14. 44	24. 0	14. 39	·1087					
14. 49	22. 45	14. 55	·1094					
15. 10	25. 0	15. 2	·1088					
15. 24	25. 0	15. 12	·1088					
15. 38	27. 0	15. 25	·1098					
15. 43	26. 10		***					
16. 7	30. 15	16. 5	·1086					
16. 15	30. 20	16. 22	·1100					
16. 39	31. 20	16. 31	·1100					
16. 44	30. 50	16. 40	·1107					
16. 49	32. 30	16. 47	·1107					
16. 54	31. 55	16. 55	·1102					
16. 57	32. 20		***					
17. 12	30. 0	18. 0	·1113					
17. 41	33. 5	18. 12	·1108					
18. 6	33. 30	18. 38	·1113					
18. 23	31. 0	18. 50	·1112					
18. 32	32. 30	19. 17	·1096					
18. 45	31. 0	19. 42	·1096					
18. 54	31. 55	20. 0	·1083					
	***	20. 22	·1077					
			***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.10		Apr.10						
h m	° ′ ″	h m		h m		h m	°	°
19. 28	21. 31. 30	20. 45	·1083					
19. 45	32. 55	20. 55	·1077					
19. 55	32. 15	21. 12	·1088					
20. 38	38. 30		* * *					
	* * *	21. 25	·1085					
21. 12	38. 0	23. 40	·1087					
21. 30	40. 15	23. 46	·1103					
21. 52	40. 0	23. 59	·1101					
22. 54	41. 0							
23. 15	44. 50							
23. 27	42. 30							
23. 39	41. 0							
23. 44	42. 30							
23. 56	42. 0							
23. 59	42. 25							
Apr.11		Apr.11		Apr.11		Apr.11		
0. 0	21. 42. 25	0. 0	·1102	0. 0	·02280	6. 50	51 ·0	52 ·5
0. 10	43. 30	0. 15	·1098	0. 40	·02259	21. 0	47 ·0	48 ·4
0. 13	42. 0	0. 24	·1088	1. 50	·02310			
0. 16	43. 15	0. 41	·1092		* * *			
0. 22	41. 50	0. 50	·1106	5. 23	·01883			
0. 47	45. 40	1. 7	·1112	8. 58	·01846			
1. 0	44. 0	1. 31	·1098	9. 29	·01880			
1. 19	46. 50	1. 53	·1119		* * *			
1. 52	37. 0	2. 4	·1106	13. 15	·01759			
2. 10	33. 30	2. 20	·1124	16. 45	·01944			
2. 24	38. 0	2. 35	·1108	17. 18	·01947			
2. 41	38. 0	2. 40	·1114	19. 0	·02078			
2. 45	37. 10	2. 55	·1104	23. 7	02303			
	* * *	3. 17	·1111	23. 59	·02297			
3. 18	40. 20		* * *					
3. 31	38. 40	3. 45	·1099					
3. 40	39. 30		* * *					
4. 9	34. 0	4. 29	·1114					
4. 15	35. 40	4. 42	·1102					
4. 28	35. 0	4. 52	·1104					
4. 45	31. 50	5. 10	·1134					
5. 7	24. 15		* * *					
5. 23	30. 0	5. 45	·1114					
5. 45	33. 20	6. 7	·1108					
5. 56	31. 30	6. 29	·1115					
6. 0	31. 50	6. 37	·1111					
6. 13	30. 55	6. 54	·1126					
6. 28	32. 0	7. 7	·1112					
6. 59	29. 0	7. 40	·1103					
7. 10	30. 5	7. 50	·1108					
7. 13	39. 50	8. 0	·1102					
7. 24	31. 55	8. 13	·1108					
7. 40	30. 30	8. 30	·1102					
7. 58	30. 15	8. 55	·1108					
8. 15	25. 0	9. 6	·1104					
8. 28	26. 35	9. 15	·1116					
	* * *	9. 26	·1102					
8. 48	24. 20	9. 35	·1106					
9. 15	33. 0	9. 55	·1101					
9. 26	32. 15	10. 10	·1107					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.11		Apr.11						
h m	° ′ ″	h m		h m		h m	°	°
9. 39	21. 35. 45	10. 40	·1100					
9. 44	33. 0		* * *					
10. 12	26. 0	11. 20	·1100					
10. 36	25. 10	11. 50	·1108					
10. 44	26. 0	12. 2	·1101					
10. 57	25. 0	12. 14	·1109					
11. 30	30. 10	12. 30	·1095					
12. 0	28. 15	12. 51	·1106					
12. 24	35. 0	13. 0	·1106					
12. 31	33. 50	13. 10	·1112					
12. 45	33. 30	13. 18	·1109					
12. 51	33. 50	14. 0	·1111					
13. 11	32. 45		* * *					
13. 15	32. 45	15. 8	·1099					
13. 52	28. 50	15. 46	·1104					
14. 14	28. 55	16. 18	·1102					
14. 43	28. 0	17. 0	·1122					
14. 55	29. 0	17. 26	·1119					
15. 44	28. 0	17. 45	·1104					
16. 16	30. 30	18. 16	·1106					
16. 30	30. 20	18. 55	·1098					
16. 33	31. 0	19. 45	·1099					
16. 59	30. 40	20. 25	·1088					
17. 9	31. 10	21. 0	·1065					
17. 22	29. 20	21. 35	·1058					
17. 37	30. 0	22. 1	·1070					
17. 57	28. 30	22. 55	·1064					
18. 12	29. 50		* * *					
18. 25	27. 40	23. 59	·1089					
18. 37	27. 30							
18. 57	28. 35							
19. 10	27. 30							
19. 39	27. 20							
19. 54	27. 45							
20. 10	25. 30							
	* * *							
21. 10	29. 35							
21. 28	32. 30							
21. 45	32. 0							
22. 28	36. 30							
22. 40	36. 0							
22. 52	37. 20							
23. 12	37. 0							
23. 22	37. 15							
23. 30	36. 50							
23. 59	39. 30							
Apr.12		Apr.12		Apr.12		Apr.12		
0. 0	21. 39. 30	0. 0	·1090	0. 0	·02297	1. 0	50 ·0	50 ·7
0. 12	40. 15	0. 8	·1092	0. 53	·02273	3. 0	52 ·7	52 ·[illegible]
0. 22	38. 35	0. 15	·1086	1. 56	·02237	9. 0	53 ·0	53 ·0
1. 8	40. 30		* * *	3. 45	·02017	21. 0	46 ·8	47 ·0
	* * *	0. 55	·1096	4. 42	·01953 ·02032			
2. 13	38. 0	1. 10	·1090					
2. 41	38. 55	2. 0	·1098	8. 30	·01953			
3. 0	36. 0	2. 10	·1093	10. 30	·01936			
3. 17	36. 30	2. 35	·1101	12. 21	·02007			
3. 44	35. 20	3. 0	·1092	13. 12	·01976			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr.12		Apr.12		Apr.12				
h m	° ′ ″	h m		h m		h m	°	°
4. 2	21. 36. 30	3. 45	·1096	14. 45	·02120			
4. 29	35. 30	4. 9	·1107	16. 45	·02293			
4. 45	36. 30		***	17. 30	·02273			
4. 52	36. 0	5. 5	·1107	18. 56	·02275			
5. 11	36. 5	5. 30	·1114	23. 56	·02206			
5. 50	32. 55	5. 46	·1104					
6. 0	29. 0	6. 2	·1117					
6. 12	32. 30	6. 11	·1108					
6. 24	30. 30	6. 31	·1109					
6. 40	31. 40	6. 44	·1099					
6. 49	30. 45	6. 55	·1102					
6. 58	30. 45	7. 4	·1097					
7. 22	28. 50	7. 42	·1098					
7. 45	30. 55	7. 55	·1094					
8. 10	26. 30	8. 10	·1107					
8. 21	29. 30	8. 23	·1101					
8. 30	30. 15	8. 39	·1098					
8. 45	29. 30	9. 28	·1100					
8. 59	30. 0	9. 47	·1113					
9. 5	29. 30	10. 0	·1110					
9. 42	33. 10	10. 20	·1113					
9. 46	32. 30	10. 43	·1102					
9. 52	33. 40	11. 41	·1110					
10. 40	30. 0	12. 1	·1100					
10. 54	31. 20	12. 44	·1104					
11. 39	31. 30		***					
12. 15	40. 0	13. 55	·1112					
12. 34	39. 50	14. 9	·1106					
12. 57	34. 30	14. 30	·1116					
13. 11	33. 25	14. 40	·1114					
13. 29	30. 50	14. 50	·1118					
13. 59	31. 50	15. 18	·1104					
14. 28	30. 45		***					
14. 52	25. 0	16. 10	·1108					
15. 24	25. 35		***					
16. 0	32. 50	17. 29	·1133					
16. 13	32. 20	17. 45	·1128					
16. 26	33. 0		***					
16. 45	30. 0	18. 42	·1120					
17. 30	31. 30	19. 7	·1124					
17. 40	31. 0		***					
18. 5	31. 20	20. 8	·1103					
18. 29	29. 30	20. 35	·1107					
18. 36	30. 0	22. 5	·1083					
18. 45	29. 20	22. 30	·1086					
18. 59	30. 45	22. 45	·1092					
	***	23. 25	·1089					
19. 31	31. 30	23. 38	·1092					
	***	23. 54	·1086					
20. 27	28. 50							
20. 39	32. 0							
21. 6	30. 0							
21. 40	32. 30							
22. 6	35. 10							
22. 29	34. 30							
22. 40	35. 30							
23. 12	36. 45							
23. 30	38. 40							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr.12								
h m	° ′ ″	h m		h m		h m	°	°
23. 45	21. 37. 45							
23. 59	40. 20							
Apr.13		Apr.13		Apr.13		Apr.13		
0. 0	21. 40. 25	0. 0	·1093	0. 12	·02204	1. 0	51 ·0	50 ·7
0. 51	42. 30	0. 25	·1091		***	3. 0	54 ·2	53 ·6
1. 32	41. 50	0. 40	·1093	3. 21	·01967	9. 0	55 ·0	54 ·2
1. 55	43. 45	1. 10	·1086	4. 7	·01980	21. 0	44 ·7	46 ·2
2. 12	41. 50	1. 27	·1088	5. 43	·01938			
2. 24	42. 30	2. 0	·1108	5. 52	·01957			
2. 44	38. 55	2. 8	·1101	9. 52	·01893			
3. 0	35. 10	2. 30	·1100	11. 7	·01947			
3. 10	39. 40	2. 45	·1118	12. 22	·01913			
3. 25	32. 0	2. 55	·1112	12. 52	·02020			
	***	3. 6	·1126	14. 45	·02303			
3. 55	32. 30	3. 16	·1108	15. 26	·02243			
4. 10	36. 20	3. 25	·1122	15. 48	·02256			
4. 26	36. 0	3. 55	·1102	16. 45	·02193			
4. 39	37. 0	4. 7	·1107	18. 0	·02203			
4. 52	36. 30	5. 0	·1090	21. 39	·02196			
5. 22	36. 0	5. 44	·1104	23. 59	·02197			
5. 54	33. 50		***					
6. 10	33. 45	6. 35	·1093					
6. 30	31. 50		***					
7. 4	31. 10	7. 16	·1101					
7. 26	33. 40	7. 30	·1098					
7. 50	33. 40	7. 52	·1097					
8. 10	29. 45	8. 10	·1114					
8. 15	31. 0	8. 23	·1116					
8. 29	28. 30	8. 34	·1136					
8. 42	33. 40	8. 40	·1127					
8. 50	33. 30	8. 47	·1127					
9. 17	26. 0	9. 0	·1116					
9. 30	28. 0	9. 10	·1115					
9. 58	22. 30	9. 23	·1125					
10. 46	30. 50	9. 40	·1109					
10. 59	28. 0	9. 55	·1105					
11. 11	30. 40	10. 6	·1108					
11. 30	25. 50	10. 29	·1100					
11. 48	29. 30	10. 48	·1101					
12. 15	24. 50	11. 10	·1131					
12. 54	30. 30	11. 31	·1116					
13. 12	28. 0	11. 40	·1119					
14. 10	34. 10	11. 47	·1116					
14. 56	31. 30	12. 6	·1097					
15. 40	42. 0	12. 40	·1112					
16. 13	35. 50	12. 48	·1108					
17. 7	32. 30	12. 57	·1112					
17. 12	32. 50	13. 12	·1106					
17. 39	30. 50		***					
17. 52	31. 30	14. 30	·1114					
18. 22	31. 30	14. 54	·1122					
18. 35	32. 15	15. 25	·1113					
18. 53	31. 0	15. 51	·1126					
19. 10	31. 0	16. 5	·1122					
19. 13	30. 0	16. 35	·1132					
19. 33	31. 40		***					
19. 49	30. 30	18. 29	·1114					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.13		Apr.13						
h m	° ′ ″	h m		h m		h m	°	°
20. 5	21. 29. 0	18. 40	·1120					
20. 41	31. 40		***					
20. 52	31. 30	19. 40	·1117					
21. 43	34. 30	20. 50	·1102					
22. 10	34. 30	21. 0	·1102					
22. 30	36. 25	22. 0	·1082					
23. 0	38. 50	22. 44	·1088					
23. 17	37. 40	23. 0	·1084					
23. 30	39. 0	23. 22	·1101					
23. 45	38. 30	23. 40	·1096					
23. 56	39. 30	23. 59	·1109					
23. 59	39. 0							
Apr.14		Apr.14		Apr.14		Apr.14		
0. 0	21. 39. 0	0. 0	·1109	0. 0	·02197	1. 0	49 ·0	50 ·4
0. 45	40. 25	0. 43	·1106	0. 53	·02160	3. 0	53 ·0	54 ·5
1. 18	42. 50	1. 15	·1111	2. 51	·01867	9. 0	57 ·8	56 ·8
1. 45	41. 40	1. 55	·1102	3. 43	·01930	21. 3	52 ·0	52 ·2
2. 30	41. 0	2. 25	·1102	5. 39	·01980			
2. 40	41. 30	2. 42	·1108	6. 28	·01950			
2. 58	38. 45	2. 56	·1098	7. 12	·01962			
3. 12	39. 10		***	8. 2	·01913			
3. 32	37. 30	4. 5	·1107	10. 22	·01917			
3. 56	34. 30	4. 24	·1116	13. 12	·01972			
4. 36	34. 30	4. 40	·1107	14. 13	·01960			
5. 10	29. 20	4. 52	·1107	15. 52	·02018			
5. 37	29. 30	5. 0	·1100	21. 0	·02383			
5. 59	32. 20	5. 15	·1100	23. 0	·02437			
6. 33	32. 40	5. 46	·1120	23. 59	·02417			
6. 43	33. 30	6. 5	·1116					
7. 10	30. 20	6. 30	·1103					
7. 25	31. 30	7. 12	·1122					
7. 36	28. 10	7. 25	·1120					
7. 55	26. 30	7. 41	·1153					
8. 4	28. 50	7. 55	·1129					
8. 13	26. 30	8. 5	·1111					
8. 30	30. 50	8. 17	·1118					
	***	8. 35	·1106					
8. 54	30. 45		***					
9. 11	32. 30	9. 28	·1111					
9. 41	30. 0	9. 49	·1108					
10. 0	31. 0	10. 35	·1114					
10. 27	28. 0	10. 50	·1112					
10. 44	27. 45	10. 59	·1107					
10. 57	29. 45	11. 13	·1110					
11. 34	29. 35	11. 25	·1115					
11. 54	32. 10	11. 40	·1109					
12. 3	31. 30	11. 58	·1105					
12. 23	32. 30	12. 15	·1112					
12. 42	31. 30	12. 32	·1109					
13. 13	31. 30	13. 0	·1114					
13. 56	30. 0		***					
14. 29	37. 0	14. 10	·1112					
14. 52	37. 45	14. 30	·1102					
15. 52	32. 30	15. 10	·1118					
16. 24	31. 40		***					
16. 58	32. 30	17. 10	·1124					
17. 14	32. 30	17. 30	·1130					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.14		Apr.14						
h m	° ′ ″	h m		h m		h m	°	°
17. 44	21. 33. 55	17. 45	·1128					
18. 7	33. 0	17. 53	·1120					
19. 14	41. 35	18. 30	·1120					
19. 26	41. 10	18. 57	·1109					
19. 39	41. 30	19. 26	·1109					
19. 51	40. 25	19. 45	·1114					
20. 0	40. 30	20. 10	·1114					
21. 5	35. 20	20. 30	·1106					
21. 30	35. 30	21. 40	·1102					
22. 13	37. 25	22. 16	·1089					
22. 40	36. 30	23. 44	·1105					
23. 12	37. 40	23. 59	·1102					
23. 15	37. 20							
23. 59	39. 30							
Apr.15		Apr.15		Apr.15		Apr.15		
0. 0	21. 39. 30	0. 0	·1102	0. 0	·02417	1. 0	57 ·0	57 ·0
0. 50	40. 50		***	2. 33	·02026	3. 0	60 ·0	60 ·0
2. 40	38. 20	3. 30	·1103	3. 43	·02050	9. 0	64 ·0	63 ·5
3. 15	36. 45	4. 30	·1109		·02165	21. 0	58 ·0	58 ·5
3. 44	34. 35	5. 15	·1104	5. 22	·02156			
5. 40	30. 30	6. 9	·1106	9. 10	·02147			
6. 21	29. 45		***	11. 28	·02207			
7. 8	30. 0	7. 15	·1129	14. 18	·02404			
7. 30	28. 45	8. 0	·1122	15. 45	·02404			
7. 59	29. 20	8. 25	·1127	16. 14	·02417			
8. 16	30. 50		***	16. 41	·02406			
9. 7	26. 50	9. 30	·1123	18. 51	·02470			
9. 52	30. 0	11. 55	·1129	21. 50	·02492			
10. 12	28. 30	12. 25	·1135	22. 30	·02470			
10. 37	29. 0	12. 35	·1130	23. 59	·02306			
11. 18	28. 0	13. 2	·1131					
12. 9	32. 40	13. 40	·1137					
12. 26	31. 45		***					
13. 0	33. 50	14. 46	·1139					
13. 8	33. 20	14. 59	·1135					
13. 12	33. 55	15. 20	·1139					
13. 20	33. 0	15. 35	·1136					
13. 28	33. 20	15. 50	·1128					
13. 50	31. 50	16. 3	·1128					
14. 22	34. 30	16. 25	·1137					
14. 45	33. 30	17. 0	·1146					
15. 0	33. 40	17. 15	·1140					
15. 15	32. 30		***					
15. 31	33. 0	18. 43	·1132					
15. 46	31. 0	19. 0	·1136					
16. 10	34. 30	19. 20	·1128					
16. 56	27. 30		***					
17. 30	30. 0	22. 25	·1115					
17. 57	29. 20	23. 2	·1121					
18. 28	30. 30	23. 59	·1108					
18. 40	28. 10							
18. 45	30. 0							
19. 10	29. 30							
19. 21	28. 0							
19. 41	27. 30							
19. 53	28. 30							
	***							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.15								
h m	° ′ ″	h m		h m		h m	°	°
21. 3	21. 28. 0							
21. 44	32. 0							
22. 17	33. 0							
23. 7	37. 25							
	(†)							
Apr.16		Apr.16		Apr.16		Apr.16		
	(†)	0. 0	·1108	0. 0	·02306	1. 0	63 ·0	64 ·7
0. 39	21. 42. 0	0. 30	·1102	1. 0:	·02281	3. 0	67 ·0	68 ·0
0. 50	41. 30	2. 41	·1124	1. 47	·02079	9. 0	69 ·0	70 ·5
1. 24	42. 30	2. 52	·1116	2. 20	·02080	21. 0	57 ·6	59 ·5
2. 15	42. 20	3. 15	·1124	5. 0	·01990			
3. 10	40. 10	3. 50	·1120	6. 45	·01960			
3. 22	40. 30	4. 11	·1121	10. 0	·02048			
4. 23	37. 0	4. 27	·1134	10. 50	·02050			
4. 38	37. 10	4. 45	·1125	13. 7	·02410			
6. 28	31. 20	5. 30	·1128	20. 0	·02284			
7. 45	30. 50		***	21. 45	·02200			
8. 20	31. 45	7. 52	·1125	23. 59	·02115			
9. 10	28. 40	8. 15	·1130					
9. 31	30. 45	8. 38	·1127					
9. 58	26. 30	9. 15	·1132					
10. 22	34. 5	9. 42	·1126					
10. 57	26. 0	9. 55	·1146					
13. 57	32. 15	10. 11	·1146					
15. 35	30. 20	10. 40	·1132					
16. 13	30. 30	10. 57	·1138					
16. 48	31. 30	11. 30	·1135					
18. 0	28. 50		***					
18. 22	30. 0	17. 30	·1101					
19. 13	27. 30		***					
19. 52	28. 20	20. 45:	·1135					
20. 10	27. 30	23. 0	·1116					
22. 12	32. 15	23. 30	·1114					
23. 15	36. 50	23. 59	·1121					
23. 28	37. 0							
23. 59	39. 30							
Apr.17		Apr.17		Apr.17		Apr.17		
0. 0	21. 39. 30	0. 0	·1121	0. 0	·02115	1. 0	59 ·4	60 ·0
1. 6	42. 25		***	1. 19	·02040	3. 0	61 ·0	62 ·7
1. 52	41. 0	3. 55	·1133	2. 5	·02000	9. 0	60 ·5	61 ·5
2. 44	41. 5	4. 15	·1126	3. 50	·01809	22. 15	54 ·0	54 ·5
	***	5. 15	·1137	4. 10	·01810			
4. 28	37. 20	6. 0	·1128	6. 0:	·01718			
4. 38	37. 25	6. 35	·1131	9. 8:	·01760			
6. 12	33. 30		***	14. 10	{ ·02187 ·02126			
6. 40	33. 15	9. 30	·1132					
10. 0	32. 15		***	19. 0:	·02190			
11. 8	31. 20	13. 30	·1145	23. 59	·02007			
	***		***					
13. 38	32. 30	15. 52	·1144					
	***	19. 45:	·1146					
16. 30	33. 30	21. 30	·1129					
18. 30	32. 35	22. 0	·1129					
19. 43	28. 50	22. 10	·1124					
20. 27	29. 30	23. 28	·1130					
20. 43	29. 10	23. 59	·1124					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.17								
h m	° ′ ″	h m		h m		h m	°	°
22. 26	21. 37. 0							
22. 50	36. 0							
23. 28	37. 30							
23. 59	37. 30							
Apr.18		Apr.18		Apr.18		Apr.18		
0. 0	21. 37. 30	0. 0	·1124	0. 0	·02007	8. 0	62 ·0	62 ·0
1. 26	38. 30		***	2. 30:	·01910	21. 0	51 ·0	52 ·8
3. 7	35. 20	1. 0	·1134	3. 55	·01704			
4. 30	33. 10	1. 25	·1136	9. 30	·01748			
6. 30	32. 10	2. 10	·1130	14. 40	·02257			
7. 15	32. 40	3. 30	·1131	19. 0	·02176			
9. 22	32. 30	5. 15	·1127	23. 59	·01940			
	***	5. 33	·1124					
16. 43	31. 10	7. 20	·1126					
	***	7. 45	·1124					
17. 11	32. 20	9. 16	·1127					
	***	9. 35	·1125					
19. 13	28. 50		***					
20. 36	27. 30	10. 56	·1129					
21. 25	28. 30		***					
22. 26	31. 25	17. 0	·1132					
23. 59	37. 30	18. 0	·1136					
		20. 0:	·1131					
		21. 45	·1117					
		22. 30	·1112					
		23. 10	·1120					
		23. 59	·1117					
Apr.19		Apr.19		Apr.19		Apr.19		
0. 0	21. 37. 30	0. 0	·1117	0. 0	·01940	1. 6	57 ·5	57 ·7
1. 8	39. 30	0. 45	·1117	1. 37	·01718	3. 0	61 ·8	62 ·3
4. 12	33. 0		***	2. 55	{ ·01830 ·01922	9. 0	61 ·9	62 ·7
4. 22	33. 10	2. 0	·1108			21. 0	53 ·0	54 ·3
4. 38	32. 25		***	4. 0	·01826			
	***	4. 0	·1105	6. 25:	·01810			
6. 40	30. 0	4. 22	·1125	12. 37	·02330			
7. 40	32. 30		***	20. 45:	·02200			
10. 8	30. 50	5. 45:	·1119	23. 55	·02002			
10. 28	39. 10	7. 25	·1128					
11. 16	30. 30	8. 15	·1128					
11. 30	28. 30	8. 25	·1125					
12. 44	31. 20	10. 0	·1136					
13. 15	32. 0	10. 25	·1134					
13. 34	31. 20	12. 10	·1136					
14. 12	32. 25		***					
14. 30	31. 30	14. 40	·1144					
14. 44	32. 0	16. 0	·1146					
15. 29	31. 10		***					
18. 22	31. 15	17. 20	·1146					
20. 30	28. 45	18. 55:	·1151					
23. 20	38. 30	21. 24	·1132					
23. 59	40. 10	23. 50	·1131					
Apr.20		Apr.20		Apr.20		Apr.20		
0. 0	21. 40. 10	0. 0	·1128	0. 0	·01970	1. 0	58 ·0	59 ·0
0. 50	41. 10	0. 20	·1130	2. 5	·01750	3. 0	62 ·0	63 ·0
1. 14	40. 20	1. 0	·1120	3. 45	·01852	9. 0	66 ·0	67 ·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
Apr. 20	
h m	° ′ ″
1. 47	21. 40. 30
2. 0	39. 30
2. 17	40. 5
	***
3. 15	37. 0
3. 29	37. 40
3. 39	37. 0
3. 47	37. 30
4. 0	36. 45
5. 10	35. 30
5. 25	34. 30
6. 2	34. 40
6. 43	33. 20
6. 56	33. 30
7. 15	31. 55
7. 41	26. 0
8. 10	24. 0
8. 26	25. 40
8. 54	32. 20
10. 27	29. 0
10. 40	30. 40
11. 0	26. 30
11. 22	26. 30
11. 42	25. 0
12. 30	26. 25
13. 15	41. 10
14. 12	29. 0
14. 57	31. 40
15. 14	31. 20
15. 52	27. 30
16. 26	27. 30
16. 37	28. 25
	***
17. 22	27. 0
	***
17. 36	27. 50
	***
18. 30	26. 10
19. 10	29. 10
19. 36	27. 30
	***
20. 10	27. 0
20. 12	29. 15
21. 14	30. 0
	***
22. 15	34. 50
22. 45	37. 55
22. 54	37. 50
23. 22	40. 20
23. 59	42. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Apr. 20	
h m	
1. 15	·1136
	***
1. 50	·1129
2. 10	·1136
2. 25	·1136
2. 44	·1126
2. 45	·1130
3. 0	·1130
3. 7	·1126
3. 28	·1139
	***
3. 35	·1135
3. 46	·1147
4. 0	·1138
4. 5	·1144
	***
4. 30	·1136
4. 45	·1137
5. 4	·1146
	***
5. 25	·1139
5. 40	·1142
	***
6. 25	·1136
	***
7. 43	·1142
8. 16	·1134
8. 31	·1140
8. 45	·1129
8. 58	·1142
	***
10. 30	·1142
10. 42	·1149
11. 3	·1154
11. 45	·1140
12. 6	·1141
12. 30	·1134
12. 45	·1138
13. 0	·1147
13. 40	·1148
14. 0	·1146
	***
14. 55	·1158
	***
16. 54	·1164
17. 25	·1161
	***
18. 55	·1168
19. 14	·1161
	***
20. 24	·1158
	***
21. 40	·1140
22. 25	·1130
22. 40	·1135
23. 0	·1126
23. 20	·1132
23. 59	·1129

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Apr. 20	
h m	
5. 20	·01960
9. 0	·02018
11. 8	·02137
13. 7	·02370
14. 0	·02230
21. 55	·02180
23. 59	·02018

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 20		
h m	°	°
21. 0	55 ·0	56 ·2

Greenwich Mean Solar Time.	Western Declination.
Apr. 21	
h m	° ′ ″
0. 7	21. 41. 45
0. 56	44. 30
1. 4	43. 30
1. 30	45. 50
1. 51	42. 0
2. 20	43. 20
3. 30	38. 30
4. 28	37. 20
4. 40	36. 0
5. 14	33. 35
6. 28	31. 20
8. 22	30. 55
8. 54	33. 0
9. 2	32. 10
9. 10	32. 50
9. 23	31. 15
9. 40	31. 0
10. 12	26. 20
10. 24	26. 20
10. 52	22. 35
10. 57	23. 30
11. 10	22. 30
11. 20	20. 20
11. 33	26. 20
12. 41	17. 0
13. 12	24. 55
13. 22	22. 30
14. 8	31. 30
14. 25	23. 0
14. 47	21. 5
14. 54	22. 30
15. 7	22. 0
15. 48	30. 30
	***
17. 8	30. 15
	***
19. 12	31. 0
19. 54	29. 15
20. 12	30. 10
20. 22	29. 30
20. 38	29. 20
20. 48	30. 45
20. 52	30. 30
21. 8	32. 5
21. 45	32. 30
22. 22	33. 5
22. 45	35. 10
23. 18	36. 30
23. 59	38. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Apr. 21	
h m	
0. 0	·1129
1. 40	·1125
1. 50	·1108
2. 8	·1118
2. 30	·1122
	***
3. 30	·1122
3. 45	·1131
4. 30	·1133
4. 55	·1127
	***
5. 14	·1126
7. 15	·1144
7. 24	·1138
8. 16	·1138
8. 30	·1144
9. 15	·1140
9. 55	·1155
10. 5	·1142
10. 53	·1124
11. 2	·1124
11. 59	·1152
12. 30	·1121
13. 0	·1125
13. 30	·1098
13. 43	·1106
13. 50	·1094
14. 14	·1132
14. 45	·1155
15. 6	·1140
15. 17	·1144
15. 27	·1138
15. 40	·1138
16. 9	·1143
17. 15	·1148
	***
18. 55	·1145
	***
21. 50	·1126
22. 5	·1135
	***
23. 55	·1140

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Apr. 21	
h m	
0. 0	·02018
1. 39	·01744
2. 55	·01843 ·02120
4. 17	·01940
5. 30	·02019
6. 23	·02007
7. 0	·02020
7. 41	·02075
10. 11	·02206
11. 42	·02322
12. 45	·02223
13. 12	·02237
13. 41	·02160
13. 55	·02156
14. 0	·02127
14. 30	·02220
15. 32	·02296
17. 40	·02327
23. 59	·02029

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 21		
h m	°	°
1. 0	59 ·0	60 ·7
3. 0	62 ·6	65 ·2
9. 0	67 ·4	68 ·5
21. 0	58 ·7	59 ·2

Greenwich Mean Solar Time.	Western Declination.
Apr. 22	
0. 0	21. 38. 30
1. 0	40. 20
3. 10	34. 30
3. 56	33. 40
5. 12	32. 0
5. 58	33. 0
6. 51	31. 50

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Apr. 22	
0. 0	·1140
0. 45	·1138
2. 0	·1133
2. 42	·1142
3. 15	·1138
3. 55	·1148
4. 16	·1140
	***

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Apr. 22	
0. 0	·02029
1. 15	·01794
1. 52	·01827
3. 51	·01846
5. 12	·01890
5. 55	·01840
6. 54	·01953

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 22		
1. 0	64 ·0	65 ·2
3. 0	67 ·0	68 ·0
9. 0	66 ·0	66 ·5
21. 0	56 ·0	57 ·7

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.22		Apr.22		Apr.22				
h m	° ′ ″	h m		h m		h m	°	°
8. 12	21. 32. 45	4. 45	·1146	8. 0	·02074			
10. 0	31. 50		***	11. 11	·02447			
	***	5. 15	·1140	15. 14	·02333			
14. 30	30. 30	5. 25	·1147	20. 30	·02255			
14. 55	31. 40		***	23. 59	·02022			
15. 27	30. 0	6. 44	·1148					
16. 45	30. 20		***					
17. 0	29. 15	7. 48	·1158					
17. 43	29. 35	8. 7	·1153					
18. 32	28. 50	8. 24	·1158					
19. 30	28. 10		***					
19. 44	27. 15	10. 55	·1167					
19. 43	27. 45	11. 50	·1166					
20. 0	26. 0	12. 30	·1170					
20. 14	28. 0		***					
20. 47	28. 15	13. 54	·1169					
21. 40	30. 10	14. 14	·1175					
23. 34	40. 10		***					
23. 48	39. 40	16. 55	·1172					
23. 59	41. 0	17. 55	·1184					
		18. 10	·1177					
			***					
		18. 54	·1180					
		21. 9	·1170					
			***					
		22. 15	·1154					
			***					
		23. 59	·1154					
Apr.23		Apr.23		Apr.23		Apr.23		
0. 0	21. 41. 0	0. 0	·1154	0. 0	·02022	1. 0	61 ·2	63 ·2
0. 13	40. 30	0. 25	·1165	2. 0	·01713	3. 0	63 ·5	65 ·0
0. 30	42. 0	0. 50	·1155	3. 4	{ ·01764 ·01960	9. 0	63 ·7	64 ·8
0. 44	41. 30		***			21. 0	56 ·0	56 ·8
0. 58	41. 50	2. 14	·1154	4. 15	·01864			
1. 30	43. 35	2. 30	·1164	6. 24	·01925			
2. 10	41. 30	2. 50	·1157	9. 15	·02034			
2. 15	41. 50	3. 15	·1164	12. 18	·02356			
2. 28	41. 10	3. 45	·1158	19. 10	·02230			
2. 33	42. 0	4. 7	·1168	22. 40	·01992			
2. 44	40. 30		***	23. 59	·01866			
2. 50	40. 45	5. 7	·1163					
3. 7	39. 30	5. 25	·1170					
4. 28	38. 40		***					
5. 57	32. 30	6. 55	·1163					
7. 39	32. 30	7. 20	·1171					
8. 42	33. 30		***					
	***	9. 3	·1173					
15. 26	30. 20	9. 50	·1177					
16. 12	30. 50		***					
16. 52	29. 20	11. 55	·1173					
	***		***					
19. 2	28. 30	14. 24	·1178					
19. 8	32. 40		***					
19. 17	29. 0	15. 55:	·1183					
19. 49	29. 10	17. 25	·1189					
20. 54	30. 50	18. 10	·1182					
21. 15	33. 0	18. 53	·1188					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.23		Apr.23						
h m	° ′ ″	h m		h m		h m	°	°
21. 30	21. 34. 0	19. 7	·1184					
21. 57	40. 0	19. 28	·1186					
22. 10	40. 15	19. 40	·1202					
	(†)	20. 25	·1202					
			***					
		23. 30:	·1175					
		23. 45	·1177					
Apr.24		Apr.24		Apr.24		Apr.24		
0. 0	21. 40. 30	0. 0	·1180	0. 0	·01866	1. 0	60 ·6	61 ·2
1. 42	38. 10	1. 0	·1180	2. 13	·01665	3. 0	63 ·0	64 ·0
2. 29	36. 0		***	3. 25	·01746	9. 0	64 ·5	66 ·0
4. 12	33. 0	2. 0	·1175	7. 49	·01828	22. 20	57 ·0	58 ·4
4. 22	33. 20		***	10. 29:	·02013			
4. 55	32. 25	4. 0	·1182	13. 15	·02396			
5. 10	32. 35	4. 22	·1191	19. 40	·02287			
7. 9	30. 30		***	23. 59	·02136			
7. 58	31. 40	5. 25	·1174					
8. 50	29. 10	5. 40	·1180					
9. 59	32. 30	5. 50	·1175					
12. 2	32. 40		***					
16. 22	30. 50	7. 40	·1188					
18. 21	28. 5	7. 45	·1185					
19. 54	27. 10	8. 35	·1184					
20. 40	28. 0	9. 30	·1188					
23. 40	36. 40	13. 24	·1196					
23. 59	37. 0	18. 15	·1193					
		21. 0	·1182					
		23. 59	·1176					
Apr.25		Apr.25		Apr.25		Apr.25		
0. 0	21. 37. 0	0. 0	·1176	0. 0	·02136	6. 54	60 ·7	61 ·6
1. 31	38. 50	1. 0	·1179	1. 24	·02112	21. 0	53 ·6	56 ·2
3. 0	37. 20	1. 15	·1176	3. 54	·02023			
5. 14	32. 5	3. 15	·1187	8. 39:	·01800			
6. 21	31. 10	6. 45	·1192	13. 15	{ ·02062 ·02017			
7. 45	31. 45		***					
8. 15	32. 45	11. 8	·1196	19. 25	·02007			
10. 23	33. 30		***	23. 59	·01847			
	(†)	13. 6	·1194					
14. 27	32. 45	17. 45:	·1196					
16. 52	32. 15	18. 55	·1192					
17. 40	31. 0	19. 15	·1193					
	***	20. 10	·1185					
19. 41	31. 25	22. 25	·1175					
19. 51	32. 20	23. 59	·1176					
20. 11	32. 5							
21. 45	35. 35							
22. 50	40. 20							
23. 42	42. 30							
23. 59	42. 0							
Apr.26		Apr.26		Apr.26		Apr.26		
0. 0	21. 42. 0	0. 0	·1176	0. 0	·01847	1. 0	55 ·4	56 ·7
1. 40	40. 30	1. 0	·1170	2. 44	·01622	3. 0	58 ·5	60 ·0
2. 41	37. 40	1. 46	·1173	3. 45	·01697	9. 0	62 ·0	63 ·0
6. 10	31. 50	4. 35	·1166	5. 54	·01724	21. 0	52 ·3	55 ·0
7. 0	31. 50		***	6. 22	·01688			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
Apr. 26	
h m	° ' "
7. 45	21. 32. 35
8. 46	32. 10
9. 11	33. 10
	***
11. 40	33. 30
12. 15	33. 0
12. 39	34. 35
13. 9	33. 30
13. 32	34. 30
17. 30	31. 50
19. 9	29. 0
19. 28	28. 45
19. 40	27. 35
19. 52	28. 55
20. 4	28. 35
20. 27	30. 0
20. 41	30. 10
20. 52	32. 30
21. 30	33. 20
21. 51	35. 0
22. 12	33. 50
22. 29	36. 0
22. 39	36. 5
23. 59	42. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Apr. 26	
h m	
7. 0	·1174
7. 40	·1170
9. 11	·1173
	***
11. 15	·1167
12. 0	·1172
12. 35	·1170
13. 0	·1172
	***
19. 7	·1171
20. 40	·1152
21. 31	·1148
21. 52	·1151
22. 9	·1143
22. 27	·1149
22. 40	·1142
22. 46	·1143
23. 10	·1129
23. 40	·1134
23. 59	·1135

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Apr. 26	
h m	
10. 0:	·01740
15. 0	·02307
19. 40	·02230
23. 59	·02130

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	°	

Greenwich Mean Solar Time.	Western Declination.
Apr. 27	
0. 0	21. 42. 30
0. 36	45. 10
1. 25	44. 30
1. 59	42. 50
2. 2	43. 15
2. 24	41. 50
3. 44	38. 10
3. 52	38. 25
4. 52	36. 20
5. 0	35. 0
5. 45	33. 30
6. 0	33. 20
6. 21	34. 10
6. 43	33. 20
10. 21	33. 0
13. 40	34. 0
14. 6	33. 30
15. 43	33. 45
15. 56	34. 10
17. 26	34. 5
17. 41	32. 30
17. 54	33. 0
18. 6	32. 50
18. 13	31. 45
18. 39	32. 40
18. 45	31. 10
19. 2	32. 0
19. 22	31. 10
19. 30	29. 50
19. 39	31. 0
19. 45	28. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Apr. 27	
0. 0	·1135
0. 20	·1130
0. 50	·1123
1. 40	·1142
1. 55	·1142
2. 8	·1149
2. 25	·1146
3. 7	·1152
3. 30	·1152
4. 16	·1158
4. 30	·1151
4. 54	·1155
4. 59	·1144
	***
5. 40	·1156
	***
6. 0	·1154
6. 13	·1159
6. 27	·1152
7. 25	·1161
	***
9. 43	·1159
	***
12. 10	·1161
12. 16	·1156
13. 30	·1162
	***
14. 57	·1158
	***
18. 20:	·1161
	***

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Apr. 27	
0. 0	·02130
3. 0	·02060
10. 0:	·01800
15. 40	·02019
15. 49	·01994
19. 15:	·02040
23. 59	·01968

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Apr. 27		
1. 0	54 ·2	55 ·4
3. 0	56 ·0	56 ·8
9. 0	57 ·0	58 ·5
21. 0	53 ·8	55 ·8

Greenwich Mean Solar Time.	Western Declination.
Apr. 27	
h m	° ' "
19. 53	21. 31. 30
20. 11	28. 30
20. 19	29. 50
20. 25	29. 0
20. 30	30. 0
21. 0	31. 5
21. 17	30. 0
	***
21. 45	31. 0
21. 52	30. 20
22. 30	30. 55
	***
23. 59	37. 45

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Apr. 27	
h m	
21. 43	·1138
	***
23. 59	·1124

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.

Greenwich Mean Solar Time.	Western Declination.
Apr. 28	
0. 0	21. 37. 45
0. 24	42. 35
0. 39	40. 0
0. 57	42. 10
1. 14	41. 45
1. 27	43. 30
1. 51	41. 15
2. 3	42. 20
2. 20	40. 0
3. 0	38. 15
3. 39	40. 20
3. 51	41. 50
4. 13	40. 20
4. 27	41. 0
4. 49	36. 50
5. 12	34. 25
5. 38	36. 55
5. 58	35. 0
6. 21	34. 55
6. 40	33. 20
7. 20	33. 30
7. 33	33. 0
7. 43	33. 30
8. 0	32. 0
	***
9. 40	33. 45
	***
10. 22	33. 0
	***
11. 0	34. 25
	***
12. 4	33. 35
13. 45	34. 30
14. 29	33. 30
	***
15. 10	33. 30
15. 24	32. 35
15. 43	33. 25
	***
16. 40	31. 45
	***
18. 52	30. 50
19. 8	29. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Apr. 28	
0. 0	·1124
0. 17	·1124
0. 31	·1133
0. 45	·1128
1. 6	·1113
1. 15	·1118
1. 27	·1143
1. 55	·1143
2. 0	·1154
2. 28	·1103
2. 53	·1123
3. 10	·1129
3. 17	·1138
3. 33	·1135
3. 45	·1144
4. 12	·1125
4. 25	·1140
4. 45	·1119
5. 8	·1123
5. 22	·1130
5. 52	·1120
6. 13	·1127
6. 30	·1119
7. 20	·1130
7. 37	·1126
	***
8. 55	·1130
9. 25	·1135
9. 52	·1130
10. 55	·1132
	***
11. 40	·1138
12. 2	·1134
	***
14. 12	·1144
14. 36	·1142
15. 14	·1146
	***
16. 30	·1143
	***
17. 20	·1148
18. 40	·1146
19. 15	·1150

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Apr. 28	
0. 0	·01968
2. 30	·01695
4. 7	·01780
	***
7. 45:	·01780
14. 5	·02368
19. 40	·02280
23. 59	·02173

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Apr. 28		
1. 0	58 ·4	59 ·0
3. 0	62 ·3	62 ·5
9. 0	64 ·7	64 ·3
21. 0	54 ·0	56 ·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.28		Apr.28						
h m	° ′ ″	h m		h m		h m	°	°
19. 16	21. 31. 30	20. 15	·1147					
20. 9	30. 25	20. 47	·1138					
20. 21	32. 20	21. 8	·1139					
20. 49	32. 0	21. 45	·1132					
21. 28	33. 25	22. 10	·1121					
21. 43	32. 40	22. 30	·1124					
21. 52	34. 5	22. 45	·1120					
22. 9	33. 35		***					
23. 43	40. 10	23. 55	·1126					
23. 56	40. 0							
Apr.29		Apr.29		Apr.29		Apr.29		
0. 0	21. 40. 5	0. 0	·1126	0. 0	·02176	1. 0	57·2	57·7
0. 57	41. 0	1. 19	·1124	2. 7	·02092	3. 0	60·0	60·0
1. 19	39. 30	1. 30	·1130	5. 0	·01640	9. 0	61·0	61·7
1. 32	40. 25		***	5. 52	·01664	21. 0	54·7	56·0
3. 26	36. 50	2. 15	·1128	8. 28:	·01637			
6. 0	33. 0	3. 30	·1131	10. 40	·01757			
6. 26	33. 40	3. 54	·1127	15. 52	·02283			
6. 30	33. 0	4. 44	·1130	16. 44	·02255			
	(†)	5. 0	·1126	16. 52	·02186			
7. 58	33. 10	5. 17	·1132	17. 20	·02207			
9. 12	33. 50	5. 41	·1125	18. 28	·02195			
10. 41	33. 20	5. 50	·1128	19. 29	·02207			
	***	6. 15	·1123	23. 59	·02196			
14. 11	34. 10	7. 0	·1129					
14. 45	33. 30		***					
	***	9. 35	·1133					
16. 13	33. 30	10. 30	·1138					
	***		***					
19. 22	30. 35	11. 55	·1134					
19. 34	30. 0		***					
19. 49	29. 55	13. 6	·1140					
20. 12	30. 50		***					
20. 21	30. 40	16. 17	·1146					
21. 54	33. 30	18. 0	·1144					
23. 59	40. 25	19. 30	·1136					
		20. 10	·1136					
		20. 45	·1132					
		22. 15	·1118					
		23. 0	·1120					
		23. 59	·1127					
Apr.30		Apr.30		Apr.30		Apr.30		
0. 0	21. 40. 25	0. 0	·1127	0. 0	·02196	1. 0	57·5	56·7
0. 12	40. 0	0. 30	·1126	1. 0	{ ·02183	3. 0	59·5	58·5
0. 26	40. 30	3. 0	·1143		·02163	9. 0	57·0	57·4
0. 51	39. 0	3. 25	·1140	3. 30	·01937	21. 0	50·0	49·6
3. 22	34. 0	4. 20	·1144	7. 30:	·01807			
5. 30	32. 25	5. 15	·1142	12. 30	·02217			
6. 12	32. 0	6. 15	·1144	16. 18	·02176			
7. 43	33. 30	6. 40	·1147	16. 26	·02133			
8. 0	33. 0	7. 0	·1142	16. 45	·02150			
9. 58	33. 30	7. 25	·1148	19. 22	·02128			
10. 39	33. 0	7. 40	·1146	20. 40	·02063			
	***	8. 5	·1148	21. 59	·02033			
15. 43	33. 35	9. 4	·1146	23. 59	·01937			
	***	10. 45	·1151					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.30		Apr.30						
h m	° ′ ″	h m		h m		h m	°	°
18. 55	21. 30. 30	17. 42	·1170					
19. 38	28. 25	18. 11	·1161					
20. 12	29. 30		***					
20. 25	29. 0	19. 55	·1159					
20. 58	33. 0	21. 0	·1152					
21. 43	32. 30	21. 45	·1152					
22. 11	33. 25	22. 15	·1145					
22. 38	36. 5	23. 10	·1153					
22. 51	35. 30	23. 59	·1156					
23. 7	35. 45							
23. 12	34. 30							
23. 59	36. 0							
May 1		May 1		May 1		May 1		
0. 0	21. 36. 0	0. 0	·1156	0. 0	·01937	1. 0	53·5	53·4
0. 51	37. 40		***	1. 40	·01807	3. 0	55·0	55·0
1. 7	37. 20	1. 10	·1153	3. 18	{ ·01563	9. 0	56·0	56·7
2. 15	36. 10		***		·01596	22. 30	49·0	49·0
2. 30	36. 25	2. 39	·1160	8. 0	·01587			
3. 45	33. 5	3. 11	·1153	13. 7:	·01586			
4. 29	33. 30		***	19. 18	·02024			
5. 30	31. 0	3. 42	·1164	21. 43	·02175			
6. 19	31. 35	4. 52	·1160	21. 52	·02130			
7. 0	30. 0	5. 27	·1168	23. 59	·02120			
7. 40	27. 30	5. 45	·1164					
8. 10	28. 35	6. 5	·1164					
8. 40	25. 30	6. 24	·1166					
9. 22	30. 30		***					
9. 54	31. 30	7. 25	·1151					
10. 10	31. 0		***					
	***	8. 20	·1154					
11. 22	31. 55	8. 40	·1148					
11. 40	30. 45	9. 10	·1155					
11. 54	31. 45	10. 30	·1156					
15. 52	31. 50	11. 8	·1161					
17. 46	30. 0	11. 25	·1158					
18. 4	28. 30	11. 40	·1162					
18. 15	29. 0	13. 0	·1148					
19. 10	27. 30	14. 35	·1157					
20. 40	26. 35	16. 13	·1161					
23. 59	35. 0	19. 0	·1159					
		21. 25	·1145					
		22. 50	·1140					
		23. 59	·1140					
May 2		May 2		May 2		May 2		
0. 0	21. 35. 0	0. 0	·1140	0. 0	·02120	7. 38	52·3	54·2
0. 54	36. 50	1. 30	·1146	4. 7	·02056	21. 0	49·2	51·0
2. 17	37. 30	2. 17	·1154	10. 43:	·01807			
4. 30	33. 40	3. 9	·1152	15. 25	·02007			
7. 0	31. 10	4. 25	·1154	15. 36	·01979			
9. 29	30. 55	4. 50	·1162	16. 59	·02028			
	***		***	21. 12	·02007			
10. 39	31. 0	5. 45	·1166	23. 46	·01840			
	***	6. 0	·1163					
11. 32	32. 0	6. 30	·1166					
	***	9. 30	·1158					
17. 12	31. 30		***					

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Greenwich Mean Solar Time.	Western Declination.
May 2	
h m	° ′ ″
20. 47	21. 27. 15
22. 30	30. 30
23. 12	32. 20
23. 39	33. 40
23. 59	34. 10
May 3	
0. 0	21. 34. 10
0. 13	34. 30
2. 40	35. 55
3. 40	33. 50
5. 33	31. 20
6. 13	30. 0
6. 56	30. 0
7. 11	30. 50
7. 29	30. 20
7. 53	29. 0
8. 42	29. 55
	***
9. 48	30. 0
	***
10. 0	28. 35
	***
12. 30	31. 25
12. 53	30. 30
	***
14. 17	31. 45
	***
15. 42	31. 30
16. 49	29. 35
17. 45	29. 0
17. 52	29. 50
18. 13	28. 30
19. 30	28. 35
19. 54	30. 35
20. 7	29. 55
20. 22	30. 45
20. 54	29. 35
21. 7	30. 15
21. 30	30. 0
21. 57	30. 10
23. 35	35. 30
23. 59	36. 0
May 4	
0. 0	21. 36. 0
1. 0	37. 30
3. 12	35. 0
3. 50	34. 30
4. 28	33. 45
5. 0	33. 40
5. 22	33. 5
6. 44	32. 10
7. 22	32. 55
8. 21	32. 30
9. 30	33. 30
May 4	
h m	° ′ ″
9. 52	21. 31. 0
	***
15. 51	31. 45
	***
18. 39	28. 45
19. 26	28. 20
19. 52	28. 30
20. 41	27. 55
22. 25	31. 50
23. 43	36. 30
23. 59	36. 30
May 5	
0. 0	21. 36. 30
0. 59	36. 55
4. 22	31. 40
5. 21	30. 45
9. 36	31. 50
10. 4	30. 45
10. 50	31. 30
11. 26	29. 55
	***
13. 57	31. 45
14. 12	30. 50
	***
15. 26	33. 30
	***
16. 14	32. 30
	***
17. 45	28. 40
18. 0	29. 0
19. 13	27. 30
20. 52	29. 20
21. 58	34. 30
22. 21	33. 55
22. 45	34. 0
23. 13	35. 30
23. 26	34. 30
23. 59	36. 0
May 6	
0. 0	21. 36. 0
0. 22	37. 30
0. 44	37. 0
1. 22	37. 30
3. 49	33. 15
5. 50	32. 30
	(†)
8. 54	32. 0
9. 13	33. 20
	***
11. 6	32. 0
	***
15. 29	31. 40
	***
16. 0	29. 30
16. 28	30. 45
	***

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
May 2	
h m	
18. 30:	·1162
21. 17	·1148
	***
22. 30	·1142
22. 50	·1150
	***
23. 58	·1146
May 3	
0. 0	·1146
0. 20	·1148
0. 35	·1146
	***
2. 41	·1146
	***
3. 35	·1137
	***
5. 0	·1135
5. 30	·1136
6. 0	·1142
6. 35	·1137
6. 45	·1137
7. 25	·1135
7. 43	·1128
8. 16	·1125
8. 50	·1128
9. 0	·1126
	***
12. 45	·1142
	***
17. 39	·1154
	***
19. 32	·1146
	***
21. 45	·1142
23. 30	·1138
23. 59	·1134
May 4	
0. 0	·1134
	***
1. 47	·1132
3. 5	·1138
3. 35	·1136
4. 22	·1142
5. 45	·1147
	***
9. 16	·1149
9. 40	·1143
9. 55	·1150
	***
May 4	
h m	
11. 0	·1146
13. 15	·1148
15. 30	·1153
18. 0:	·1158
22. 10	·1131
23. 59	·1137
May 5	
0. 0	·1137
1. 8	·1135
1. 50	·1139
3. 0	·1129
	***
6. 10	·1137
8. 0	·1134
8. 54	·1135
10. 28	·1133
11. 0	·1138
11. 40	·1134
14. 50	·1141
17. 50	·1147
18. 20	·1138
20. 46	·1126
21. 0	·1128
21. 48	·1122
23. 0	·1139
23. 59	·1139
May 6	
0. 0	·1139
	***
1. 6	·1141
	***
3. 30	·1152
4. 11	·1153
4. 35	·1147
4. 45	·1151
5. 30	·1146
	(†)
8. 54	·1161
	***
11. 25	·1163
15. 30	·1174
16. 15	·1172
18. 0	·1176
19. 25	·1173

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
May 3	
0. 15	·01838
1. 10	·01784
2. 15	·01610
5. 12:	·01730
7. 55	·01720
11. 40:	·01850
15. 26	·02343
22. 10	·02230
23. 59	·02180
May 4	
0. 0	·02180
1. 0	·02137
5. 42	·01607
9. 44	·01596
13. 3:	·01762
16. 45	·02270
18. 43	·02230 ·02170
19. 14	·02188
23. 59	·02080
h m	
May 5	
0. 0	·02080
1. 15	·02008
3. 12	·01688
4. 36	·01737
7. 26	·01693
11. 19	·01706
14. 22:	·01828
18. 34	·02350
21. 13	·02263
23. 59	·02250
May 6	
0. 0	·02250
1. 0	·02166
3. 10	·01730
5. 17	·01717
	(†)
8. 54	·01860
13. 4	·02360
13. 13	·02334
20. 30	·02220
23. 59	·02065

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
May 3		
1. 0	54 ·2	54 ·5
3. 0	57 ·5	57 ·6
9. 0	62 ·0	62 ·5
21. 0	51 ·5	53 ·2
May 4		
1. 0	55 ·0	56 ·0
3. 0	57 ·2	57 ·8
9. 0	57 ·7	58 ·5
21. 0	50 ·7	52 ·2
h m		
May 5		
1. 0	54 ·7	55 ·[illegible]
3. 0	58 ·7	59 ·[illegible]
9. 0	61 ·8	63 ·[illegible]
21. 0	55 ·3	55 ·[illegible]
May 6		
1. 0	59 ·7	59 ·[illegible]
3. 0	62 ·2	62 ·[illegible]
9. 0	65 ·0	62 ·0
21. 0	50 ·4	51 ·[illegible]

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 6		May 6						
h m	° ′ ″	h m		h m		h m	°	°
18. 2	21. 30. 0	21. 24	·1152					
18. 31	28. 20		***					
18. 45	28. 45	23. 59	·1168					
18. 54	28. 25							
19. 14	28. 10							
20. 12	29. 5							
22. 11	34. 30							
22. 35	36. 45							
23. 59	37. 40							
May 7		May 7		May 7		May 7		
0. 0	21. 37. 40	0. 0	·1168	0. 0	·02065	1. 0	55 ·3	56 ·3
1. 15	38. 0	1. 15	·1166	1. 22	·01973	3. 0	59 ·4	60 ·0
3. 49	33. 45	3. 43	·1156	3. 12	·01645	9. 0	62 ·2	62 ·5
5. 40	33. 55	4. 24	·1164	4. 0	·01710	21. 0	52 ·2	52 ·2
6. 54	32. 50	5. 20	·1158	5. 37	·01710			
8. 5	34. 0	5. 45	·1164	6. 42	·01676			
8. 22	33. 0	5. 52	·1159	7. 50	·01690			
9. 10	31. 30	6. 25	·1167	9. 21	·01744			
9. 45:	23. 10	6. 57	·1161	9. 44	·01786			
	***	8. 15	·1161	10. 12	·01805			
10. 39	27. 20	8. 45	·1176	11. 46	·01893			
11. 40	28. 10	9. 15	·1169	12. 12	·01884			
12. 6	24. 50	9. 29	·1147	12. 32	·01916			
12. 27	31. 55	10. 0	·1157	12. 45	·01862			
12. 38	30. 10	10. 26	·1146	13. 0	·01937			
12. 52	33. 20	10. 45	·1149	13. 13	·01916			
13. 39	18. 0	10. 57	·1144	14. 56	{ ·02274			
13. 42	20. 20		***		·02248			
14. 11	12. 0	11. 30	·1146	15. 22	·02246			
14. 22	15. 0	12. 0	·1157	16. 13	·02193			
14. 39	12. 20	12. 45	·1095	16. 56	·02224			
15. 13	23. 0	12. 58	·1124	17. 14	·02192			
15. 43	18. 0	13. 15	·1114		***			
15. 54	20. 50	13. 20	·1114	22. 29	·02270			
16. 4	17. 30	13. 45	·1132	23. 59	·02197			
16. 31	20. 10	13. 57	·1129					
16. 49	26. 30	14. 10	·1129					
17. 2	24. 0	14. 20	·1138					
17. 22	27. 0	14. 30	·1136					
17. 51	27. 55	14. 45	·1139					
18. 15	25. 0	15. 0	·1136					
18. 26	27. 0	15. 10	·1137					
18. 44	24. 15	15. 40	·1168					
18. 58	26. 45	15. 54	·1156					
19. 5	26. 0	16. 0	·1160					
19. 18	29. 0	16. 7	·1144					
19. 26	28. 45	16. 25	·1138					
19. 34	26. 10	16. 54	·1146					
19. 45	30. 10	17. 0	·1142					
20. 7	30. 0	17. 20	·1148					
20. 14	32. 0		***					
20. 21	31. 30	18. 20	·1139					
20. 29	33. 0	18. 30	·1144					
20. 43	31. 30	18. 57	·1136					
21. 0	34. 30	19. 10	·1143					
21. 39	36. 30	19. 25	·1150					
21. 51	36. 45	19. 45	·1130					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 7		May 7						
h m	° ′ ″	h m		h m		h m	°	°
22. 27	21. 39. 50	19. 55	·1136					
23. 27	39. 40	19. 59	·1132					
	***	20. 12	·1140					
23. 59	41. 30		***					
		21. 33	·1134					
		21. 50	·1108					
		22. 20	·1104					
		23. 30	·1148					
		23. 59	·1146					
May 8		May 8		May 8		May 8		
0. 0	21. 41. 30		(†)	0. 0	·02197	1. 0	57 ·7	58 ·3
	***	1. 8	·1138	1. 29	·01990	3. 0	60 ·3	60 ·4
0. 47	41. 40		***	2. 40	·01737	9. 0	60 ·8	61 ·0
1. 12	38. 35	2. 15	·1136	3. 42	·01770	22. 0	52 ·2	54 ·0
1. 21	38. 50	3. 54	·1172	4. 43	·01765			
1. 51	36. 50	4. 23	·1161	5. 0	·01807			
1. 59	37. 20	4. 44	·1146	7. 40	·01705			
	***	4. 56	·1177	10. 29	·01759			
2. 58	34. 0	5. 15	·1180	10. 55	·01745			
3. 12	35. 30		***	11. 43	·01752			
3. 44	35. 0	6. 5	·1155	12. 24	·01708			
4. 6	32. 0		***	12. 45	·01788			
4. 15	26. 0	7. 2	·1159	13. 56	·01890			
4. 36	29. 40	7. 26	·1174	14. 22	·01970			
4. 45	29. 20	7. 30	·1167	14. 30	·01967			
5. 0	32. 30	7. 55	·1175	15. 43	·02250			
	***	8. 29	·1147	16. 0	·02184			
5. 18	32. 0	8. 45	·1160	19. 22	·02246			
5. 27	30. 20	9. 25	·1150	19. 51	·02284			
5. 39	32. 0	9. 54	·1158	23. 59	·02250			
6. 20	33. 0		***					
6. 34	29. 45	10. 32	·1159					
6. 53	31. 30	10. 48	·1143					
7. 13	23. 15	10. 58	·1148					
7. 52	30. 45	11. 14	·1134					
8. 6	29. 0	11. 40	·1168					
8. 37	33. 0	11. 52	·1150					
9. 29	32. 55	12. 13	·1136					
10. 8	36. 30	12. 40	·1161					
10. 25	33. 0	12. 51	·1154					
11. 11	42. 0	13. 13	·1153					
11. 45	31. 45	13. 27	·1135					
11. 59	33. 25	13. 45	·1151					
	(†)	14. 18	·1162					
14. 33	27. 50	14. 41	·1156					
14. 44	26. 0	15. 15	·1134					
15. 42	38. 0	15. 42	·1151					
16. 8	31. 0	15. 55	·1148					
16. 58:	28. 0	16. 23	·1161					
17. 48	33. 20	16. 55	·1162					
18. 6	32. 10	17. 25	·1148					
18. 11	33. 0	17. 43	·1156					
18. 21	31. 0	18. 10	·1159					
18. 40	33. 40	18. 30	·1155					
18. 44	33. 0	19. 0	·1139					
18. 50	34. 45	19. 9	·1146					
19. 0	32. 0	19. 30	·1135					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
May 8		May 8						
h m	° ′ ″	h m		h m		h m	°	°
19. 11	21. 33. 20	19. 45	·1139					
19. 27	29. 0	20. 0	·1136					
19. 56	31. 35	20. 40	·1143					
20. 22	30. 30	21. 30	·1132					
20. 39	32. 10	21. 45	·1134					
21. 8	31. 20	22. 0	·1129					
21. 52	32. 10	22. 25	·1136					
22. 30	34. 10	23. 15	·1124					
22. 58	37. 25	23. 59	·1125					
23. 38	37. 30							
23. 47	37. 0							
23. 59	38. 0							
May 9		May 9		May 9		May 9		
0. 0	21. 38. 0	0. 0	·1125	0. 0	·02250	7. 52	61 ·0	61 ·3
0. 28	37. 0	0. 30	·1125	2. 25	·02007	21. 0	54 ·0	55 ·2
0. 51	38. 50	0. 48	·1132	4. 15	·01715			
1. 10	38. 40	1. 12	·1125	5. 49	·01737			
1. 22	41. 0	1. 30	·1139	7. 12	·01696			
1. 45	38. 30	1. 55	·1125	9. 43	·01707			
2. 9	37. 50	2. 27	·1125	10. 25	·01606			
2. 42	33. 20	3. 5	·1171	10. 57	·01599			
3. 4	34. 0	3. 25	·1151	12. 4	·01710			
3. 17	34. 0	3. 45	·1157	12. 25	·01706			
3. 35	35. 20	4. 8	·1148	15. 40	·02130			
4. 39	32. 30	4. 50	·1158	15. 52	·02138			
4. 51	32. 20	5. 10	·1173	17. 29	·02340			
5. 0	33. 45		***		·02298			
5. 26	33. 0	5. 33	·1167	20. 6	·02320			
6. 7	26. 0		***	23. 20	·02296			
6. 56	27. 30	6. 13	·1184	23. 59	·02247			
7. 0	26. 0	6. 30	·1178					
7. 11	27. 25	6. 44	·1188					
7. 22	26. 10	6. 55	·1172					
7. 38	28. 40	7. 3	·1174					
7. 56	28. 10	7. 15	·1166					
8. 13	29. 0	7. 34	·1168					
8. 40	28. 35	7. 59	·1163					
9. 47	30. 0		***					
9. 56	37. 0	9. 2	·1157					
10. 5	37. 0		***					
10. 15	39. 55	9. 27	·1161					
10. 30	31. 0	9. 55	·1190					
10. 39	33. 50	10. 7	·1187					
11. 43	18. 0	10. 21	·1174					
12. 10	33. 0	10. 39	·1184					
13. 13	28. 40	10. 58	·1152					
13. 20	29. 0	11. 8	·1155					
14. 14	26. 10	11. 22	·1152					
15. 0	28. 0	11. 45	·1159					
15. 42	32. 0	11. 57	·1151					
16. 7	30. 0	12. 42	·1166					
16. 22	32. 15	13. 10	·1154					
16. 40	29. 20	13. 18	·1161					
17. 0	32. 30	13. 35	·1156					
17. 15	31. 0	13. 50	·1165					
17. 22	32. 0	14. 13	·1167					
17. 45	30. 0		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
May 9		May 9						
h m	° ′ ″	h m		h m		h m	°	°
17. 59	21. 33. 0	14. 42	·1155					
18. 16	29. 35	14. 50	·1159					
18. 40	33. 15	15. 24	·1147					
18. 50	32. 40	15. 41	·1158					
19. 7	33. 45	16. 13	·1165					
19. 20	32. 0	16. 30	·1156					
19. 52	30. 50	16. 50	·1157					
20. 13	31. 50	17. 7	·1152					
20. 44	30. 55	17. 15	·1156					
21. 4	33. 0	17. 57	·1158					
21. 34	33. 0	18. 10	·1146					
	***	18. 17	·1142					
23. 30	37. 25	18. 35	·1156					
23. 59	37. 50	18. 55	·1150					
			***					
		20. 0	·1155					
			***					
		21. 25	·1155					
			***					
		23. 55	·1136					
May 10		May 10		May 10		May 10		
0. 0	21. 37. 50		(†)	0. 0	·02247	1. 0	57 ·7	58 ·
0. 15	36. 0	0. 30	·1151	1. 36	·02128	3. 0	61 ·0	61 ·
0. 50	37. 20	0. 55	·1152	3. 11	·01786	9. 0	64 ·0	65 ·0
1. 34	36. 10	1. 26	·1136		***	21. 0	55 ·7	56 ·
1. 50	33. 0	1. 41	·1157	7. 14	·01790			
2. 35	33. 45	2. 6	·1155	9. 52	·01817			
2. 44	33. 20	2. 20	·1148	11. 54	·01890			
3. 14	33. 45	3. 0	·1143	13. 40	·02036			
3. 54	33. 40	3. 22	·1148	16. 12	·02437			
4. 12	35. 0	3. 32	·1145		·02392			
4. 24	33. 40	3. 58	·1148	22. 18	·02337			
4. 30	34. 5	4. 11	·1159	23. 59	·02336			
4. 44	33. 20	4. 31	·1162					
4. 56	33. 25	4. 46	·1158					
5. 12	32. 40	5. 2	·1161					
5. 21	32. 30	5. 36	·1155					
5. 51	25. 30	5. 50	·1175					
6. 46	31. 0	6. 10	·1180					
7. 51	30. 40	6. 28	·1173					
8. 25	29. 0	6. 57	·1164					
8. 45	29. 55	7. 30	·1168					
9. 7	30. 0	8. 14	·1161					
9. 20	32. 10	8. 30	·1164					
9. 40	32. 20	8. 41	·1161					
10. 10	30. 10	9. 5	·1178					
10. 16	31. 0	9. 15	·1170					
10. 36	30. 50	9. 30	·1178					
10. 51	32. 0	9. 55	·1165					
11. 0	31. 5	10. 15	·1161					
11. 16	31. 30	10. 50	·1168					
12. 7	28. 30	11. 0	·1161					
12. 42	33. 5	11. 15	·1164					
12. 59	33. 40		***					
	***	11. 55	·1155					
14. 52	31. 30	12. 7	·1157					
	***	12. 36	·1150					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 10		May 10						
h m	° ′ ″	h m		h m		h m	°	°
15. 40	21. 29. 10	13. 30	·1161					
16. 10	29. 20	14. 15	·1158					
16. 28	31. 30		***					
17. 12	28. 30	15. 45	·1164					
17. 39	29. 10	16. 15	·1162					
17. 52	31. 30	17. 15	·1166					
18. 15	31. 0	17. 54	·1168					
18. 22	29. 40		***					
18. 42	29. 30	18. 25	·1160					
18. 51	27. 0		***					
19. 14	29. 20	19. 58	·1156					
19. 22	28. 30	21. 55	·1170					
19. 37	29. 45	22. 30	·1164					
20. 0	29. 20	22. 45	·1168					
20. 17	30. 30	22. 55	·1161					
21. 45	30. 40	23. 30	·1160					
22. 17	33. 25	23. 59	·1163					
23. 59	35. 30							
May 11		May 11		May 11		May 11		
0. 0	21. 35. 30	0. 0	·1164	0. 0	·02336	1. 0	58·7	59·4
0. 32	36. 0	1. 47	·1169	1. 27	·02220	3. 0	61·0	62·0
1. 50	36. 50	2. 40	·1162	3. 57	·01724	9. 0	64·2	65·5
2. 28	35. 40	2. 55	·1168	7. 56	·01764	21. 0	54·4	55·0
2. 57	36. 30	3. 20	·1166	11. 14	·01837			
	***	4. 0	·1166	15. 39	{·02437			
5. 24	33. 50		***		·02390			
6. 12	32. 55	5. 39	·1160	19. 22	·02385			
7. 4	28. 20	5. 52	·1166	21. 23	·02328			
7. 12	28. 30	6. 0	·1164		(†)			
7. 16	27. 0	6. 28	·1170					
7. 30	30. 0	6. 47	·1170					
8. 12	27. 55	6. 55	·1166					
8. 30	29. 10	7. 25	·1181					
9. 22	30. 25	7. 50	·1167					
9. 50	33. 50	8. 55	·1158					
10. 0	33. 55	10. 12	·1168					
10. 26	26. 30	10. 30	·1188					
10. 50:	32. 35		***					
11. 30	23. 20	11. 25	·1169					
11. 48	22. 30		***					
12. 12	26. 30	12. 7	·1162					
12. 56	26. 20	13. 15	·1164					
14. 5	35. 0	14. 13	·1177					
14. 52	29. 30	14. 30	·1173					
	***		***					
16. 12	28. 20	15. 55	·1176					
16. 33	29. 30	16. 12	·1172					
	***	16. 30	·1174					
17. 30	28. 20	16. 55	·1168					
18. 6	29. 30	18. 10	·1162					
18. 39	27. 30	19. 3	·1166					
19. 17	30. 10	19. 25	·1160					
20. 0	28. 50	20. 16	·1162					
20. 29	29. 0	21. 20	·1156					
20. 53	31. 30	21. 40	·1149					
21. 39	32. 0		***					
	(†)	22. 30	·1168					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		May 11						
h m	° ′ ″	h m		h m		h m	°	°
		22. 45	·1158					
		23. 50	·1172					
May 12		May 12		May 12		May 12		
	(†)		(†)		(†)	1. 0	54·4	56·7
0. 30	21. 34. 20	1. 0	·1130*	1. 0	·01754*	3. 0	54·7	56·5
	***	3. 0	·1144*	3. 0	·02265*	9. 0	55·0	58·4
2. 4	34. 15	4. 30	·1125	3. 15	·02286	21. 0	52·0	52·3
	***	5. 35	·1120	4. 41	·02320			
5. 40	28. 30	7. 30	·1123	7. 45	·01997			
6. 13	28. 10	7. 45	·1119	10. 43	·01965			
7. 3	28. 45	8. 52	·1121	13. 0	·02147			
8. 12	28. 15	9. 11	·1131	15. 11	·02456			
8. 30	28. 20	9. 55	·1125	15. 43	·02487			
8. 50	28. 10	10. 30	·1126	18. 26	{·02466			
9. 36	23. 40	10. 42	·1122		·02387			
10. 36	24. 10	10. 48	·1123	21. 10	·02390			
10. 44	23. 10	11. 0	·1116		(†)			
10. 53	25. 0	11. 22	·1118					
11. 33	24. 30	12. 10	·1109					
11. 56	28. 30	12. 42	·1120					
12. 22	27. 0	13. 0	·1117					
13. 44	25. 30	14. 15	·1119					
14. 53	27. 20	15. 0	·1125					
15. 30	24. 0	15. 25	·1122					
17. 22	26. 0	15. 55	·1125					
17. 52	27. 40	16. 18	·1123					
18. 39	27. 20	17. 10	·1127					
18. 59	24. 30		***					
19. 13	26. 30	18. 0	·1124					
19. 26	26. 0	18. 16	·1132					
19. 36	24. 10	18. 29	·1126					
19. 41	24. 50	18. 40	·1136					
19. 50	23. 55		***					
20. 12	26. 20	19. 25	·1135					
20. 26	26. 20		***					
20. 35	27. 0	20. 20	·1125					
21. 28	27. 30	21. 0	·1129					
21. 55	30. 30		***					
23. 0	35. 10	23. 59	·1124					
23. 59	37. 45							
May 13		May 13		May 13		May 13		
0. 0	21. 37. 50	0. 0	·1125		(†)	1. 0	56·3	57·2
0. 28	38. 30	1. 30	·1124	1. 0	·01949*	3. 0	58·2	59·7
0. 40	38. 45	2. 31	·1130	1. 40	·02147	9. 0	57·6	59·2
1. 30	35. 55	3. 56	·1118	5. 45	{·02110	21. 0	53·3	55·4
1. 44	36. 5	4. 45	·1125		·02200			
2. 15	35. 0	5. 14	·1122	8. 10:	·02150			
2. 26	35. 30	5. 50	·1133	12. 11	·02330			
3. 10	33. 45	6. 22:	·1122	14. 9	·02540			
3. 20	34. 0	7. 30	·1128	18. 15	{·02546			
4. 12	31. 50	8. 5	·1120		·02470			
4. 42	29. 25	8. 25	·1131	20. 45	·02450			
5. 15	28. 55	9. 15:	·1118	23. 59	·02127			
5. 45	25. 20	10. 1	·1124					
6. 8	28. 0	11. 0	·1118					
7. 16	28. 20	11. 36	·1120					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
May 13 h m	° ′ ″
8. 9	21. 26. 20
8. 22	22. 30
8. 30	23. 20
8. 44	22. 30
9. 59	27. 0
10. 45	24. 20
11. 45	26. 5
11. 54	30. 20
12. 19	23. 30
12. 29	25. 0
12. 40	23. 35
12. 48	26. 0
13. 57	28. 20
14. 28	26. 45
15. 22	27. 0
16. 12	26. 0
19. 10:	21. 0
20. 7	21. 55
21. 15	26. 45
22. 18	33. 0
23. 26	37. 40
23. 32	37. 0
23. 59	38. 55
May 14	
0. 0	21. 38. 55
0. 42	37. 30
	***
2. 30	36. 25
	***
3. 53	31. 0
	***
6. 17	28. 0
8. 54	28. 20
10. 52	27. 50
11. 10	28. 10
11. 56	28. 0
12. 10	29. 10
12. 52	29. 15
13. 21	28. 0
15. 22	27. 30
15. 44	26. 40
17. 11	25. 20
19. 10	21. 40
20. 54	22. 30
23. 59	34. 10
May 15	
0. 0	21. 34. 10
1. 45	36. 20
4. 17	31. 45
7. 45	29. 15
8. 0	29. 30
8. 41	28. 20
9. 0	28. 40
9. 18	28. 0
9. 29	28. 30
9. 56	28. 15
10. 35	21. 29. 10
11. 30	27. 50
11. 43	28. 20
12. 56	27. 55
13. 12	28. 20
13. 45	27. 0
14. 10	26. 50
14. 59	28. 15
15. 52	28. 10
16. 59	27. 20
17. 13	27. 25
	***
19. 0	24. 30
19. 44	24. 30
23. 0	31. 0
23. 59	33. 30
May 16	
0. 0	21. 33. 30
1. 11	35. 20
2. 15	35. 5
3. 12	33. 30
4. 36	32. 10
6. 42	29. 15
8. 15	30. 0
10. 5	29. 35
10. 13	28. 50
11. 11	27. 55
11. 45	24. 20
12. 15	28. 50
12. 47	22. 0
13. 11	23. 10
13. 39	22. 50
14. 30	25. 0
14. 52	24. 55
15. 11	26. 15
15. 26	25. 30
16. 12	26. 30
16. 21	27. 20
16. 39	27. 0
17. 24	23. 10
17. 47	23. 45
18. 51	22. 45
19. 44	26. 15
20. 4	25. 20
20. 43	27. 20
20. 54	26. 30
23. 30	33. 40
23. 59	34. 0
May 17	
0. 0	21. 34. 0
2. 15	37. 10
2. 44	35. 0
2. 54	35. 20
3. 21	33. 50
	***

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
May 13 h m	
11. 45	·1135
11. 57	·1132
12. 10	·1135
12. 30	·1124
12. 39	·1124
13. 0	·1118
14. 15	·1124
16. 0	·1124
17. 0	·1126
21. 48	·1104
22. 1	·1098
23. 59	·1101
May 14	
0. 0	·1101
0. 20	·1108
2. 53	·1122
3. 16	·1114
3. 47	·1128
	***
4. 40	·1128
5. 14	·1125
7. 15	·1127
8. 8	·1133
8. 30	·1129
9. 0	·1132
10. 40	·1128
15. 14	·1126
17. 45:	·1129
21. 0	·1110
21. 54	·1110
23. 20	·1104
23. 40	·1092
23. 59	·1089
May 15	
0. 0	·1089
0. 10	·1083
0. 39	·1084
0. 55	·1079
2. 40	·1090
3. 16	·1085
3. 50	·1088
5. 43	·1087
6. 41	·1094
8. 0:	·1088
9. 0	·1100
9. 15	·1097
	***
10. 28	·1096
10. 50	·1102
	***
11. 57	·1101
13. 0	·1104
13. 30	·1109
14. 15	·1108
15. 30	·1114
16. 40	·1114
17. 55	·1117
18. 50	·1106
19. 10	·1107
22. 0	·1088
23. 59	·1098
May 16	
0. 0	·1098
1. 40	·1105
1. 58	·1100
	***
2. 30	·1108
2. 45	·1105
3. 40	·1105
4. 15	·1110
4. 35	·1106
5. 20	·1102
6. 20	·1110
6. 45	·1104
7. 10	·1105
8. 2	·1112
8. 45	·1112
9. 10	·1108
	***
10. 57	·1113
	***
12. 0	·1105
12. 45	·1124
	***
14. 45	·1108
15. 15	·1114
16. 5	·1113
17. 0	·1120
17. 42	·1113
18. 25:	·1117
21. 30	·1096
21. 45	·1085
22. 15	·108[illegible]
23. 59	·1081
May 17	
0. 0	·1080
0. 50	·1078
1. 40	·1093
2. 15	·1110
2. 53	·1095

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
May 14 h m	
0. 0	·02127
3. 15	·02050
5. 15	·02067 ·02110
7. 11	·02050
10. 7	·02167
13. 45	·02326
16. 59	·02647
18. 13	·02557
19. 30	·02637
21. 40	·02570 ·02370
23. 59	·02300
May 15	
0. 0	·02300
1. 44	·02247
3. 10	·02110
5. 11	·02175
7. 15	·02143
9. 35	·02130
12. 10	·02312
14. 48	·02670
19. 29	·02620
23. 59	·02406
May 16	
0. 0	·02406
1. 0	·02367 ·02070
1. 47	·02037
3. 22	·02177
5. 52	·02216
8. 6	·02160
9. 58	·02150
12. 22	·02247
13. 30	·02348
15. 26	[illegible]
21. 9	·02610 ·02508
23. 59	·02396
May 17	
0. 0	·02396
2. 14	·02313
4. 10	·02163
4. 43	·02159 ·02190

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 14 h m	°	°
1. 0	57·3	58·5
3. 0	59·1	60·0
9. 0	58·2	60·0
21. 0	55·6	57·0
May 15		
1. 0	58·0	58·8
3. 0	60·6	60·8
9. 0	62·2	62·0
22. 25	57·3	58·0
May 16		
7. 50	63·5	64·5
21. 0	56·0	56·8
May 17		
1. 0	[illegible]	[illegible]
3. 0	[illegible]	[illegible]
9. 0	62·8	63·6
21. 0	[illegible]	[illegible]

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 17		May 17		May 17				
h m	° ′ ″	h m		h m		h m	°	°
5. 7	21. 32. 30	3. 50	·1114	5. 30	{ ·02180			
5. 47	29. 50	4. 4	·1110		·02256			
6. 33	28. 0	4. 51	·1121	6. 39	·02190			
6. 54	29. 30	5. 20	·1119	11. 7	·02187			
7. 26	28. 30	5. 42	·1112	13. 12	·02235			
7. 39	29. 15	5. 55	·1118	13. 40	·02238			
8. 45	21. 30	6. 41	·1114	14. 54	·02317			
10. 7	27. 30	7. 15:	·1124	15. 11	·02309			
10. 52	26. 40		***	17. 0	·02360			
13. 0	28. 30	8. 20	·1102	19. 59	{ ·02350			
13. 51:	23. 5	8. 55	·1104		·02246			
15. 0	28. 0	9. 25	·1100	23. 50	·02210			
16. 52	24. 30	10. 0	·1112					
17. 12	24. 30		***					
17. 38	25. 20	11. 0	·1113					
18. 11	27. 0		***					
18. 41	24. 20	12. 0	·1106					
19. 3	22. 25	12. 50	·1108					
	***	13. 15	·1120					
21. 27	25. 25	13. 25	·1120					
22. 0	28. 20	13. 45	·1129					
22. 30	28. 55	17. 35	·1130					
23. 41	32. 45		***					
23. 54	32. 0	20. 4	·1116					
23. 59	32. 30	21. 0	·1118					
			***					
		22. 13	·1097					
			***					
		22. 50	·1094					
		23. 15	·1100					
		23. 59	·1100					
May 18		May 18		May 18		May 18		
0. 0	21. 32. 30	0. 0	·1100	0. 12	·02190	1. 0	61 ·5	62 ·0
0. 45	35. 15	0. 46	·1106	0. 33	{ ·02187	3. 0	64 ·0	64 ·0
	***	1. 5	·1104		·02150	9. 0	65 ·5	66 ·5
2. 43	34. 35		***	4. 22	·02278	21. 0	59 ·2	58 ·2
3. 10	33. 40	2. 30	·1100	5. 21	·02270			
3. 18	33. 50	3. 0	·1106	6. 7	·02284			
4. 0	32. 30	3. 15	·1100	8. 39	·02216			
4. 10	32. 45	3. 45	·1105	9. 51	·02230			
4. 58	30. 40		***	11. 30:	·02330			
5. 2	31. 20	4. 30	·1102	13. 52	·02764			
6. 10	25. 55		***	19. 27	·02656			
6. 37	27. 10	5. 8	·1113	21. 55	·02663			
7. 2	27. 5		***	23. 59	·02485			
10. 15	29. 35	5. 45	·1108					
10. 47	28. 45	6. 17	·1121					
13. 27	26. 50	7. 0:	·1113					
13. 40	27. 30	7. 55	·1117					
	***	8. 53	·1113					
17. 26	26. 0	11. 40	·1116					
19. 48:	22. 30	12. 45	·1120					
23. 30	34. 20	14. 0	·1120					
23. 59	34. 0	14. 40	·1124					
		17. 55	·1128					
		18. 11	·1121					
		18. 24	·1155					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		May 18						
h m	° ′ ″	h m		h m		h m	°	°
		19. 0	·1150					
		19. 26	·1152					
		21. 15	·1136					
			***					
		22. 55	·1129					
		23. 59	·1126					
May 19		May 19		May 19		May 19		
0. 0	21. 34. 0	0. 0	·1126	0. 0	·02485	1. 0	61 ·0	60 ·4
1. 18	34. 30	0. 30	·1131	1. 19	·02406	3. 0	62 ·0	63 ·4
2. 52	32. 15	0. 45	·1128	2. 44	·02147	9. 0	63 ·5	64 ·0
4. 8	31. 10	1. 0	·1129	5. 45	{ ·02187	21. 0	59 ·0	57 ·5
7. 15	27. 0	1. 15	·1125		·02242			
8. 40	28. 30	2. 40	·1126	6. 45	·02196			
	***	3. 5	·1130	6. 52	·02237			
9. 19	27. 20	3. 55	·1131	10. 2:	·02200			
9. 29	27. 55	4. 50:	·1156	14. 29	·02738			
9. 51	27. 30		***	21. 44	·02660			
9. 58	28. 0	7. 0	·1151	23. 37	·02395			
10. 24	26. 50	7. 45	·1158		(†)			
11. 15	27. 10		***					
11. 52	26. 10	9. 50	·1148					
12. 15	28. 0	10. 30	·1156					
13. 58	27. 35	12. 20	·1154					
16. 8	28. 15	17. 5	·1159					
16. 21	27. 20	18. 0:	·1152					
17. 38	27. 0	18. 44	·1140					
19. 10	24. 20	19. 30	·1144					
20. 33	26. 10		***					
22. 52	34. 30	19. 45	·1140					
23. 59	35. 35	21. 15	·1132					
		21. 50	·1136					
		22. 10	·1134					
		23. 0	·1136					
		23. 15	·1132					
		23. 59	·1132					
May 20		May 20		May 20		May 20		
0. 0	21. 35. 35	0. 0	·1132		(†)	1. 0	62 ·2	62 ·0
0. 8	34. 0	0. 40	·1134	0. 10	·02369	3. 0	65 ·0	65 ·2
2. 40	33. 55	2. 0	·1129	1. 43	·02147	9. 0	67 ·2	66 ·5
3. 0	33. 0	2. 40	·1136	3. 32	·02217	21. 0	60 ·5	59 ·7
5. 25	29. 10	3. 0	·1127	6. 12	·02164			
6. 40	29. 15	3. 25	·1127	6. 21	·02184			
10. 54	26. 50	3. 40	·1131	9. 0	{ ·02193			
11. 18	28. 20	5. 45	·1138		·02230			
11. 47	26. 25	6. 0	·1146	12. 25:	·02349			
12. 1	27. 15	6. 30	·1138	15. 58	·02760			
14. 53	26. 20	8. 19	·1151	19. 54	·02700			
15. 39	24. 30	8. 31	·1145	21. 53	·02710			
15. 54	24. 50	8. 55	·1150	23. 59	·02520			
16. 45	23. 20	11. 0	·1154					
18. 13	22. 0	11. 26	·1160					
18. 40	23. 30	12. 45	·1154					
18. 55	22. 45	14. 25	·1143					
19. 29	23. 20	14. 40	·1159					
20. 38	25. 40	15. 5	·1167					
20. 47	25. 30	17. 0	·1166					
			***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet	Of V. F. Magnet
May 20		May 20						
h m	° ′ ″	h m		h m		m	°	°
22. 46	21. 31. 30	19. 6	·1152					
23. 25	33. 30	19. 25	·1154					
23. 39	33. 15	20. 45	·1142					
23. 59	34. 0	21. 0	·1148					
		21. 40	·1142					
		23. 14	·1144					
		23. 32	·1140					
		23. 59	·1143					
May 21		May 21		May 21		May 21		
0. 0	21. 34. 0	0. 0	·1143	0. 0	·02520	1. 0	64 ·2	63 ·5
1. 50	35. 20	0. 55	·1146	2. 22	·02145	3. 0	64 ·5	66 ·2
5. 22	27. 0	1. 15	·1148	5. 46	·02176	9. 0	67 ·0	67 ·0
6. 10	26. 0	2. 8	·1150	5. 53	·02226	21. 0	62 ·5	62 ·2
8. 7	26. 20	3. 0	·1155	7. 25	·02213			
8. 51	27. 20	3. 33	·1152	10. 10	·02256			
9. 46	27. 5	4. 0	·1154	12. 46	·02236			
11. 12	28. 10	4. 57	·1164		***			
12. 30	28. 0	5. 15	·1161	15. 26	·02407			
13. 4	29. 0	5. 50	·1166	17. 56	·02797			
13. 28	28. 55		***	21. 7	{ ·02757			
13. 23	31. 20	7. 45	·1162		·02656			
13. 54	27. 30		***	23. 0	·02677			
14. 12	29. 55	10. 0	·1169	23. 59	·02650			
14. 23	28. 0		***					
14. 28	28. 55	13. 15	·1169					
14. 43	26. 0	13. 28	·1187					
15. 0	24. 0	13. 55	·1181					
15. 9	24. 30		***					
15. 25	20. 30	15. 10	·1190					
15. 42	24. 0	15. 30	·1177					
15. 54	24. 30		***					
16. 12	23. 45	16. 45	·1186					
16. 26	25. 0	17. 25	·1176					
16. 30	23. 55	17. 45	·1182					
16. 55	23. 55		***					
17. 17	29. 10	19. 14	·1172					
17. 44	27. 20	19. 30	·1181					
17. 50	30. 0	19. 56	·1173					
18. 11	25. 30	20. 13	·1178					
18. 15	26. 10	20. 35	·1168					
18. 28	24. 30	20. 45	·1173					
18. 43	26. 40	21. 35	·1160					
18. 51	22. 0		***					
19. 4	24. 30	22. 25	·1147					
19. 15	21. 0	22. 39	·1159					
19. 30	22. 55	23. 6	·1136					
19. 54	22. 45	23. 40	·1155					
20. 0	21. 0	23. 46	·1151					
20. 15	23. 30	23. 59	·1156					
20. 35	19. 30							
20. 48	26. 30							
	***							
21. 35	27. 0							
21. 45	25. 50							
21. 54	26. 25							
22. 12	27. 0							
22. 40	35. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 21								
h m	° ′ ″	h m		h m		h m		
22. 54	21. 33. 0							
23. 10	33. 25							
23. 26	32. 25							
23. 59	33. 0							
May 22		May 22		May 22		May 22		
0. 0	21. 33. 0	0. 0	·1156	0. 0	·02650	1. 0	64 ·5	64 ·3
0. 38	33. 25	0. 15	·1154	4. 43	·02217	3. 0	66 ·0	65 ·4
1. 51	35. 30	0. 55	·1154		***	9. 0	66 ·5	66 ·0
	***	2. 0	·1171	8. 25	·02164	21. 30	60 ·3	60 ·7
3. 11	33. 0		***	10. 40	·02200			
3. 19	32. 0	4. 15	·1177	12. 44	·02407			
3. 30	32. 55		***	15. 12	·02786			
3. 45	31. 0	6. 25	·1168	20. 18	·02720			
	***	6. 50	·1178	23. 59	·02620			
6. 4	28. 20	7. 4	·1168					
6. 14	28. 40	7. 46	·1168					
7. 9	27. 20	7. 55	·1182					
	***	8. 0	·1172					
9. 30	27. 0	8. 9	·1179					
	***	8. 30	·1170					
10. 27	28. 15	10. 0	·1180					
11. 13	26. 50	10. 11	·1201					
14. 38	24. 20	10. 17	·1193					
15. 7	26. 0	10. 25	·1203					
	***		***					
16. 39	26. 0	10. 38	·1190					
16. 45	25. 0	11. 0	·1194					
17. 7	24. 55	11. 14	·1187					
17. 13	23. 20	11. 42	·1190					
	***		***					
18. 6	23. 45	12. 30	·1186					
18. 17	22. 30	12. 50	·1190					
	***		***					
18. 41	23. 20	13. 51	·1185					
	***	14. 22	·1187					
19. 0	23. 0	14. 39	·1176					
	***		***					
19. 16	24. 30	16. 0	·1170					
	***	16. 43	·1171					
19. 44	22. 45		***					
	***	17. 28	·1180					
20. 21	25. 30		***					
	***	18. 13	·1168					
21. 36	28. 0		***					
21. 57	29. 30	19. 25	·1172					
22. 3	30. 55	19. 50	·1162					
23. 26	33. 45	20. 30	·1158					
23. 59	32. 30		***					
		21. 45	·1171					
			***					
		23. 59	·1160					
May 23		May 23		May 23		May 23		
0. 0	21. 32. 30	0. 0	·1160	0. 0	·02620	9. 0	[illegible]	61 ·5
0. 14	33. 20	0. 40	·1170	1. 29	·02553	21. 0	[illegible]	[illegible]
1. 3	33. 30	0. 55	·1163	3. 36	·02327			
					***			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet
May 23		May 23		May 23				
h m	° ′ ″	h m		h m		h m	°	°
1. 22	21. 34. 0	1. 14	·1172	5. 39	·02222			
1. 37	34. 50	1. 20	·1171		***			
2. 0	33. 30	1. 38	·1176	7. 6	·02210			
2. 22	33. 45	2. 2	·1166	7. 29	·02270			
2. 39	33. 0		***	7. 53	·02270			
4. 19	33. 10	3. 15	·1175	8. 23	·02339			
4. 38	31. 20	3. 35	·1167	9. 21	·02400			
4. 41	33. 40		***	9. 52	·02378			
4. 51	31. 35	4. 25	·1182	11. 25	·02529			
5. 12	32. 30	4. 36	·1168	11. 38	·02487			
5. 27	31. 30	4. 45	·1197	12. 4	{ ·02530			
6. 28	32. 30	4. 57	·1180		·02468			
7. 17	29. 30	5. 0	·1187	12. 45	·02437			
7. 45	30. 0	5. 5	·1180	13. 18	·02504			
7. 51	26. 30	5. 20	·1199	13. 38	·02485			
7. 54	28. 10	5. 37	·1177		(†)			
8. 14	26. 15		***	21. 0	·02540			
8. 30	26. 30	6. 0	·1185	22. 40	·02627			
8. 48	20. 0	6. 8	·1192	23. 45	·02583			
8. 57	21. 20	6. 15	·1208	23. 59	·02565			
9. 10	18. 40	6. 24	·1196					
9. 18	20. 15	6. 30	·1204					
9. 58	14. 30	6. 34	·1200					
10. 15	21. 0	6. 40	·1205					
10. 26	18. 30	6. 47	·1194					
11. 17	17. 0	6. 58	·1167					
11. 26	18. 0	7. 25	·1204					
11. 43	14. 10	7. 40	·1187					
11. 50	17. 15	7. 44	·1212					
12. 2	16. 0	7. 55	·1158					
12. 16	34. 30	8. 16	·1175					
12. 29	34. 30	8. 38	·1156					
12. 55	25. 0		***					
13. 28	33. 55	9. 5	·1158					
13. 40	29. 10	9. 15	·1164					
13. 49	29. 0	9. 29	·1170					
14. 13	19. 10	10. 0	·1151					
14. 40	32. 30		***					
14. 50	30. 5	11. 1	·1141					
15. 0	34. 30	11. 25	·1161					
15. 15	28. 20	11. 55	·1137					
15. 35	44. 50	12. 11	·1166					
16. 7	27. 15	12. 25	·1148					
16. 22	27. 20	12. 40	·1162					
16. 39	30. 50	12. 54	·1164					
16. 50	31. 0	13. 5	·1157					
16. 54	30. 30	13. 18	·1169					
	(†)	13. 30	·1161					
21. 5	29. 55		***					
21. 41	30. 5	14. 40	·1158					
22. 26	32. 0		***					
	***	15. 30	·1140					
23. 13	36. 40	15. 44	·1147					
	***	16. 5	·1162					
23. 59	38. 0		(†)					
		21. 5	·1130					
		21. 40	·1120					
		22. 25	·1124					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		May 23						
h m	° ′ ″	h m		h m		h m	°	°
		23. 20	·1119					
		23. 59	·1130					
May 24		May 24		May 24		May 24		
0. 0	21. 38. 0	0. 0	·1131	0. 0	·02565	1. 0	59 ·7	59 ·0
0. 40	38. 0	0. 8	·1128	3. 0	·02149	3. 0	59 ·5	61 ·4
1. 41	37. 30	0. 25	·1134	4. 16	·02160	9. 0	61 ·1	61 ·5
1. 58	36. 50	0. 44	·1128	6. 58	{ ·02086	21. 0	55 ·8	57 ·5
2. 10	38. 20	1. 15	·1142		·02170			
2. 18	37. 0	1. 45	·1141	9. 51	·02130			
2. 29	37. 0	1. 57	·1137	13. 40	·02230			
2. 36	39. 0	2. 10	·1158	17. 25	·02429			
2. 45	36. 30	2. 30	·1144	20. 0	·02693			
3. 11	39. 45	2. 41	·1168	22. 15	·02677			
3. 26	38. 55	3. 8	·1142	23. 59	·02693			
3. 28	39. 40	3. 17	·1134					
3. 49	36. 0	3. 25	·1146					
4. 26	36. 55	3. 30	·1137					
4. 40	35. 30		***					
4. 42	35. 40	4. 10	·1139					
5. 0	37. 30	4. 26	·1148					
5. 35	33. 5	4. 30	·1142					
6. 9	31. 25	4. 40	·1143					
6. 26	32. 10	4. 45	·1138					
6. 42	31. 30	5. 0	·1146					
8. 15	31. 0		***					
13. 14	27. 55	5. 31	·1142					
	***	5. 55	·1143					
17. 43	23. 30	6. 10	·1155					
18. 12	24. 30	7. 8	·1160					
18. 29	23. 30	9. 41	·1158					
18. 40	23. 45	11. 14	·1164					
18. 45	25. 20	11. 45	·1160					
19. 7	24. 30		***					
19. 39	23. 30	15. 0	·1158					
20. 0	24. 30		***					
20. 19	24. 0	16. 30:	·1160					
22. 52	30. 40		***					
	***	20. 30	·1138					
23. 39	34. 30	22. 25	·1136					
23. 43	34. 10	23. 0	·1133					
23. 59	37. 0	23. 25	·1136					
		23. 45	·1128					
		23. 59	·1132					
May 25		May 25		May 25		May 25		
0. 0	21. 37. 0	0. 0	·1133	0. 0	·02693	1. 0	57 ·6	58 ·5
0. 12	37. 10	0. 25	·1125	1. 45	·02674	3. 0	59 ·8	61 ·0
0. 20	36. 20	1. 0	·1128	4. 25	·02183	9. 0	61 ·4	62 ·3
2. 7	36. 0	1. 15	·1124	8. 59	{ ·02129	21. 0	56 ·4	55 ·9
2. 29	35. 0	2. 45	·1136		·02190			
2. 42	35. 20	3. 15	·1129	11. 54	·02248			
3. 0	34. 30		***	15. 13	·02715			
3. 10	34. 50	4. 46	·1135	21. 7	{ ·02666			
3. 18	33. 30	5. 8	·1130		·02590			
5. 12	30. 50	5. 57	·1142	21. 44	·02570			
5. 55	30. 15	6. 15	·1134	21. 51	·02504			
6. 26	28. 40	6. 25	·1138	23. 38	·02484			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
May 25		May 25		May 25				
h m	° ′ ″	h m		h m		h m	°	°
6. 43	21. 28. 30	7. 0	·1135	23. 59	·02347			
7. 7	27. 30	8. 12	·1142					
7. 42	27. 30	8. 25	·1139					
8. 27	29. 30		***					
10. 25	29. 30	10. 2	·1139					
11. 7	26. 0	10. 16	·1143					
11. 54	27. 50	10. 29	·1138					
12. 11	27. 30		***					
13. 40	29. 30	12. 32	·1139					
13. 55	28. 30	13. 0	·1144					
14. 40	32. 15	13. 44	·1144					
15. 7	30. 55	14. 0	·1142					
15. 54	27. 30	14. 53	·1147					
17. 31	26. 0	15. 0	·1143					
17. 40	26. 30	15. 46	·1148					
18. 0	25. 30	17. 45	·1151					
18. 40	27. 10		***					
18. 51	26. 30	19. 5	·1130					
	***	19. 15	·1134					
19. 45	27. 15	20. 3	·1129					
20. 22	24. 20	21. 0	·1132					
20. 39	26. 0	21. 30	·1127					
21. 39	27. 30		***					
22. 15	29. 20	22. 50	·1136					
22. 57	33. 30	23. 0	·1134					
23. 38	35. 10	23. 56	·1135					
23. 45	33. 40							
23. 55	33. 30							
23. 59	34. 30							
May 26		May 26		May 26		May 26		
0. 0	21. 34. 30	0. 4	·1143	0. 0	·02347	1. 0	58·5	59·8
0. 43	35. 20	0. 40	·1130	1. 50	·02006	3. 0	60·0	61·6
1. 21	36. 35	1. 5	·1139	3. 0	{ ·02037	9. 0	63·2	63·5
4. 11	33. 40	1. 35	·1138		{ ·02340	21. 6	56·0	57·0
5. 12	30. 40	2. 29	·1143	4. 43	·02154			
5. 45	29. 30	2. 43	·1139	7. 45	·02072			
6. 58	28. 0		***	10. 12	·02083			
8. 17	27. 30	3. 41	·1148	12. 55	·02308			
8. 52	27. 50	3. 54	·1144	15. 43	·02773			
9. 16	27. 30	4. 30	·1144	22. 30	·02694			
10. 52	28. 30	5. 3	·1157	23. 59	·02646			
14. 13	28. 35	5. 40	·1154					
14. 30	28. 10		***					
15. 26	28. 15	12. 46	·1156					
15. 57	26. 30	12. 54	·1144					
17. 11	23. 30	13. 12	·1161					
17. 30	23. 40	13. 24	·1156					
17. 45	22. 40	15. 0	·1164					
18. 45	22. 30	17. 14	·1160					
19. 30	23. 45	20. 49	·1142					
21. 11	29. 20	21. 9	·1146					
21. 40	31. 50	21. 30	·1136					
22. 9	32. 30	21. 55	·1135					
22. 54	36. 40	22. 8	·1128					
23. 28	37. 10	22. 27	·1126					
23. 43	36. 10	23. 16	·1138					
23. 59	35. 45	23. 59	·1144					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
May 27		May 27		May 27		May 27		
h m	° ′ ″	h m		h m			°	
0. 0	21. 35. 45	0. 0	·1145	0. 0	·02646	1. 0	58·6	59·0
0. 12	35. 20	0. 44	·1152	1. 45	·02530	3. 0	61·8	62·2
1. 17	36. 30	1. 45	·1137	3. 25	·02207	9. 0	65·5	66·5
1. 51	35. 55	2. 35	·1158	5. 7	·02256	21. 8	60·2	60·6
2. 20	36. 40	3. 13	·1128	7. 30	·02196			
2. 38	36. 40	3. 35	·1132	11. 40	·02148			
3. 11	32. 0	3. 49	·1130	13. 51	·02288			
4. 9	32. 0	4. 16	·1140	17. 30	·02884			
4. 30	30. 55	4. 40	·1133	20. 30	·02790			
5. 36	29. 0	5. 20	·1142	22. 52	·02837			
6. 52	28. 10	6. 30	·1140	23. 59	·02787			
8. 23	28. 45	8. 15	·1142					
8. 32	39. 40	9. 20:	·1148					
9. 6	28. 40	10. 15	·1146					
9. 30:	22. 0	10. 30	·1137					
9. 58	25. 10	10. 45	·1135					
10. 15	21. 30	11. 10	·1124					
10. 37	21. 0	11. 37	·1131					
12. 45	27. 30	11. 45	·1128					
14. 13	28. 5	12. 55	·1139					
14. 52	29. 0	14. 15	·1135					
15. 18	28. 10	15. 17	·1141					
15. 45	28. 20	17. 10	·1140					
16. 0	27. 30		***					
16. 14	28. 0	19. 20	·1126					
16. 59	27. 30	19. 40	·1128					
17. 30	25. 35	20. 50	·1111					
17. 51	26. 30	23. 2	·1130					
18. 22	25. 0	23. 18	·1127					
18. 30	26. 0	23. 59	·1129					
19. 12	26. 5							
19. 27	25. 5							
19. 45	26. 55							
20. 21	25. 30							
21. 15	32. 30							
21. 45	30. 40							
22. 30	30. 55							
23. 8	33. 15							
23. 59	34. 25							
May 28		May 28		May 28		May 28		
0. 0	21. 34. 25	0. 0	·1130	0. 0	·02787	1. 0	62·4	63·0
0. 40	36. 45	1. 5	·1124	1. 45	·02703	3. 0	63·5	64·5
2. 40	34. 40	4. 5:	·1141	5. 25	·02184	9. 0	64·7	65·0
3. 40	32. 50	4. 35	·1135	7. 11	{ ·02178	21. 0	61·0	60·5
3. 57	32. 45	4. 59	·1147		{ ·02253			
4. 14	32. 0	5. 16	·1127	10. 15	·02185			
4. 30	32. 10	5. 31	·1138	12. 48:	·02293			
4. 49	31. 0	5. 42	·1135	16. 54	·02857			
5. 7	31. 0	5. 51	·1141	22. 13	·02796			
5. 27	29. 10		***	23. 59	·02587			
5. 53	28. 20	7. 10	·1147					
7. 12	27. 25	8. 40	·1142					
7. 43	28. 5	9. 45	·1147					
7. 59	28. 0	10. 1	·1143					
8. 22	28. 15	10. 25	·1147					
8. 58	27. 20		***					
10. 4	29. 40	12. 55	·1147					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 28		May 28						
h m	° ′ ″	h m		h m		h m	°	°
10. 15	21. 29. 15	15. 20	·1152					
11. 4	29. 45	17. 0:	·1155					
11. 29	28. 30	19. 0	·1138					
13. 46	28. 45	19. 18	·1144					
16. 30	26. 40	20. 0	·1129					
17. 17	24. 40	20. 44	·1128					
18. 2	24. 0	21. 0	·1123					
18. 25	24. 50		***					
18. 43	23. 40	22. 30	·1122					
19. 51	23. 15	22. 44	·1107					
20. 4	24. 0		***					
20. 26	23. 20	23. 28	·1120					
20. 45	24. 45	23. 59	·1119					
20. 59	24. 10							
21. 45	26. 55							
23. 23	35. 30							
23. 59	36. 20							
May 29		May 29		May 29		May 29		
0. 0	21. 36. 20	0. 0	·1118	0. 0	·02587	1. 0	65·0	65·6
0. 37	36. 50	1. 21	·1126	1. 48	·02228	3. 0	68·0	68·6
1. 25	37. 0	2. 13	·1117	2. 42	·02277	9. 0	70·2	70·3
1. 52	36. 0	2. 17	·1119	5. 44	·02293	22. 45	64·0	66·0
2. 28	35. 20	2. 30	·1114	7. 30	·02222			
3. 38	33. 0	2. 50	·1119	11. 14:	·02390			
4. 0	33. 20	3. 10	·1112	14. 50	·02886			
5. 28	29. 30	3. 25	·1110	22. 55	·02784			
6. 44	26. 20	3. 58	·1128	23. 45	·02707			
7. 22	26. 0	4. 44	·1115					
9. 45	28. 15	5. 0	·1123					
11. 54	28. 20	5. 10	·1122					
12. 15	29. 40	5. 31	·1131					
12. 24	28. 20	5. 55	·1124					
13. 18	29. 35	6. 43	·1126					
13. 35	29. 0	7. 1	·1131					
13. 45	30. 10	7. 35	·1124					
14. 11	30. 40		***					
14. 29	28. 50	9. 0	·1126					
15. 6	28. 0	10. 30	·1132					
15. 12	28. 30	12. 0	·1129					
16. 26	26. 0	12. 27	·1136					
17. 21	25. 0	12. 41	·1133					
17. 48	25. 0		***					
18. 22	24. 20	15. 10	·1143					
18. 42	22. 30		***					
19. 6	24. 0	18. 40	·1140					
19. 29	24. 20	19. 35	·1130					
19. 42	23. 20	19. 55	·1131					
21. 5	28. 20	20. 52	·1117					
21. 25	28. 25		***					
23. 50	36. 50	22. 52	·1122					
	(†)	23. 10	·1116					
		23. 55	·1116					
May 30		May 30		May 30		May 30		
8. 15	21. 27. 46*	8. 15	·1145*	8. 15	·02208*	8. 15	71·8	72·0
21. 0	28. 29*	21. 0	·1127*	21. 0	·02966*	21. 0	68·0	67·7

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 31		May 31		May 31		May 31		
h m	° ′ ″	h m		h m		h m	°	°
	(†)		(†)		(†)	1. 0	72·5	71·7
0. 26	21. 35. 30	0. 30	·1126	0. 28	·02543	3. 0	74·0	75·3
1. 10	36. 0	0. 45	·1128	1. 50	·02237	9. 0	76·5	75·0
1. 39	36. 50	1. 15	·1120	2. 40	{ ·02228 ·02297	21. 0	69·8	69·4
1. 57	35. 30	2. 25	·1127					
4. 7	31. 10	2. 44	·1133	4. 13	{ ·02195 ·02277			
5. 21	29. 40	3. 0	·1125					
5. 51	28. 10	3. 13	·1131		***			
6. 23	28. 20	3. 49	·1127	6. 30	·02212			
6. 40	28. 0	4. 7	·1121	7. 45	·02217			
7. 10	28. 30	4. 40	·1139	9. 39	·02316			
7. 51	26. 20	5. 13	·1126	13. 52	·02830			
8. 52	29. 10	6. 20	·1142	16. 40	·02795			
9. 29	28. 30	6. 33	·1137	20. 57	·02764			
10. 7	29. 30	7. 0	·1147	23. 59	·02403			
10. 22	28. 30	7. 30	·1142					
10. 44	28. 50	8. 14	·1148					
11. 17	28. 30	8. 30	·1145					
11. 39	29. 25	8. 55	·1150					
14. 7	29. 30	9. 15	·1147					
14. 58	27. 30	9. 55	·1152					
15. 23	27. 55	10. 10	·1148					
15. 35	27. 30	10. 31	·1152					
15. 59	27. 25	11. 1	·1148					
16. 11	28. 20	11. 55	·1152					
16. 27	28. 5		***					
16. 44	29. 50	16. 59	·1146					
16. 56	28. 35	18. 10	·1148					
17. 40	27. 30	19. 9	·1134					
17. 56	25. 30	19. 22	·1138					
18. 24	23. 30	19. 45	·1125					
	***	20. 40	·1118					
19. 14	21. 45		***					
19. 39	23. 30	22. 7	·1117					
19. 48	21. 40	23. 59	·1115					
20. 14	23. 0							
20. 24	22. 10							
20. 39	23. 0							
20. 42	22. 30							
21. 41	27. 30							
23. 15	32. 30							
23. 59	33. 20							
June 1		June 1		June 1		June 1		
0. 0	21. 33. 20	0. 0	·1115	0. 0	·02403	1. 0	74·0	74·5
1. 45	33. 30		***	1. 28	·02153	3. 0	77·0	77·4
3. 9	29. 10	1. 45	·1140	3. 40	·02198	9. 0	78·7	80·0
5. 29	26. 25	2. 5	·1136	3. 55	·02280	21. 0	69·5	68·5
6. 30	28. 30		***	4. 58	·02247			
7. 31	27. 30	3. 40	·1144	5. 43	·02350			
9. 40	29. 20	4. 17	·1152	6. 26	·02377			
11. 15	28. 10	4. 35	·1146	8. 11	·02653			
12. 38	29. 10	5. 0	·1146	10. 28	·02782			
12. 51	29. 35	5. 30:	·1154	13. 27	·02649			
13. 21	27. 30	7. 8	·1143	18. 10	·02547			
14. 12	27. 45	7. 40	·1150	20. 55	·02580			
14. 28	29. 0	7. 55	·1146	23. 59	·02260			
14. 54	29. 20	8. 25	·1178					
			***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

May 30. The Photographic Traces for Declination, Horizontal Force, and Vertical Force were too faint for use.

Greenwich Mean Solar Time.	Western Declination.
June 1	
h m	° ′ ″
15. 22	21. 27. 10
15. 41	27. 0
15. 51	28. 0
16. 12	28. 15
16. 27	26. 10
16. 41	27. 0
17. 11	25. 20
17. 15	26. 25
17. 31	25. 30
17. 49	26. 0
18. 12	23. 10
18. 25	23. 20
18. 36	24. 30
18. 49	24. 0
19. 4	24. 30
20. 15	21. 15
20. 42	21. 30
20. 46	22. 45
21. 56	25. 30
23. 59	35. 30
June 2	
0. 0	21. 35. 30
0. 40	36. 30
1. 10	38. 30
1. 39	37. 30
2. 0	37. 0
	***
4. 12	31. 0
4. 47	29. 50
5. 0	30. 10
6. 0	27. 45
6. 40	27. 30
7. 9	28. 40
7. 56	29. 20
9. 12	28. 30
9. 22	29. 35
9. 50	28. 30
10. 12	28. 35
10. 45	27. 0
11. 57	27. 30
	***
15. 56	27. 30
17. 0	24. 30
	***
18. 11	24. 55
	***
18. 50	22. 30
20. 0	21. 50
20. 30	24. 30
20. 52	24. 25
22. 30	33. 0
23. 0	33. 0
23. 59	34. 50
June 3	
0. 0	21. 34. 50
0. 46	37. 15
1. 54	37. 0
2. 20	35. 20
2. 49	34. 35
2. 58	35. 10
	***
3. 54	33. 0
4. 10	31. 30
	***
6. 14	29. 10
6. 54	30. 0
7. 11	20. 55
	***
8. 22	28. 0
8. 40	29. 0
9. 10	32. 0
9. 46	30. 45
10. 4	28. 0
10. 25	26. 10
10. 45	27. 10
	(†)
12. 2	27. 20
12. 24	30. 40
12. 44	28. 20
13. 0	28. 35
13. 59	37. 30
14. 50	27. 0
15. 40	17. 0
17. 9	26. 30
17. 25	31. 0
17. 40	32. 50
18. 31	28. 20
19. 10	30. 10
19. 30	25. 15
20. 4	28. 20
20. 28	26. 0
20. 45	27. 55
21. 12	26. 50
21. 44	27. 40
22. 11	28. 0
23. 13	36. 30
23. 24	36. 0
23. 34	37. 30
23. 40	37. 10
23. 50	39. 0
23. 59	37. 40

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
June 1	
h m	
9. 20	·1182
	***
11. 30	·1175
12. 55	·1179
13. 40	·1176
14. 5	·1176
15. 25	·1183
15. 45	·1178
16. 25	·1186
	***
18. 9	·1178
18. 46	·1159
19. 25	·1158
20. 20	·1150
21. 0	·1132
21. 45	·1132
22. 11	·1140
22. 25	·1130
22. 36	·1130
	***
23. 59	·1122
June 2	
0. 0	·1122
0. 30	·1114
1. 9	·1130
1. 22	·1122
	***
2. 26	·1131
	***
3. 15	·1117
3. 45	·1124
4. 25	·1126
4. 39	·1159
4. 46	·1152
5. 2	·1167
5. 15	·1162
5. 45	·1172
6. 31	·1160
7. 14	·1168
7. 40	·1163
7. 55	·1168
	***
8. 35	·1160
9. 12	·1164
	***
9. 49	·1156
10. 55	·1164
11. 10	·1157
11. 36	·1157
	***
12. 14	·1147
	***
14. 20	·1159
	***
16. 30	·1159
17. 39	·1151
17. 56	·1156
	***
19. 30	·1145
20. 15	·1146
20. 55	·1138
21. 30	·1138
23. 0	·1136
23. 59	·1142
June 3	
0. 0	·1142
1. 0	·1135
	***
3. 0	·1144
3. 26	·1135
3. 35	·1140
	***
4. 12	·1133
	***
4. 43	·1134
5. 24	·1144
5. 55	·1147
6. 23	·1138
7. 0	·1151
7. 32	·1142
7. 45	·1146
8. 13	·1136
8. 24	·1143
8. 29	·1135
9. 0	·1146
9. 27	·1142
10. 2	·1143
10. 14	·1159
	***
11. 0	·1144
	***
12. 30	·1147
13. 40	·1159
14. 26	·1133
15. 8	·1159
16. 2	·1129
	***
17. 0	·1142
	***
18. 29	·1116
	***
19. 45	·1123
22. 15	·1108
	***
23. 35	·1080
23. 47	·1096
23. 58	·1087

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
June 2	
0. 0	·02260
0. 58	·02143 ·02074
1. 50	·01893
3. 2	·01967 ·02100
4. 12	·01970 ·02130
5. 12	·02000
8. 11	·01956
10. 44	·02047
12. 15	·02207
14. 39	·02647
20. 54	·02610
23. 13	·02440
23. 59	·02285
June 3	
0. 0	·02285
1. 40	[illegible]
5. 11	[illegible] [illegible]
7. 52	·02103
10. 29	·02247
11. 54	·02522
12. 36	·02530
13. 57	·02363
16. 25	·02400
17. 24	·02384
20. 54	[illegible] ·02450
23. 45	·02395
23. 59	·02353

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
h m		
June 2		
1. 0	72·5	73·6
3. 0	75·0	76·5
9. 0	77·0	77·4
21. 0	71·0	71·4
June 3		
1. 0	[illegible]	76·6
3. 0	[illegible]	[illegible]
9. 0	80·4	[illegible]
21. 0	[illegible]	[illegible]

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
June 4	
h m	° ′ ″
0. 0	21. 37. 35
0. 13	36. 40
0. 17	37. 0
0. 59	34. 0
1. 15	36. 40
1. 43	37. 40
	***
2. 32	32. 25
2. 45	34. 40
3. 6	32. 0
3. 12	32. 40
3. 27	31. 30
3. 42	33. 5
3. 52	32. 40
4. 0	33. 30
4. 15	32. 15
4. 29	32. 35
4. 43	23. 30
4. 52	21. 20
5. 0	31. 30
5. 15	29. 35
5. 39	31. 30
6. 0	28. 10
6. 12	29. 0
6. 24	26. 35
6. 41	28. 55
6. 54	28. 30
7. 16	26. 30
7. 44	26. 10
8. 10	28. 25
8. 21	27. 30
8. 46	28. 35
9. 14	27. 30
9. 21	28. 30
9. 39	28. 30
9. 50	22. 30
10. 7	32. 45
10. 15	28. 30
10. 29	31. 0
10. 55	24. 10
11. 31	21. 30
12. 21	27. 30
12. 39	26. 40
	***
13. 24	26. 30
13. 45	27. 0
14. 21	30. 0
15. 10	29. 30
15. 26	26. 30
16. 12	22. 30
16. 21	24. 45
16. 51	21. 50
17. 3	23. 40
17. 28	22. 0
17. 33	24. 30
17. 43	22. 40
17. 49	25. 15
17. 57	24. 10
	***
18. 41	21. 26. 30
	***
19. 29	24. 25
20. 12	24. 0
20. 30	26. 20
20. 52	25. 30
20. 57	26. 20
21. 5	25. 30
21. 26	22. 0
21. 38	21. 55
23. 19	35. 50
	(†)
June 5	
	(†)
1. 0	21. 34. 36*
3. 0	34. 27*
5. 49	30. 0
6. 9	22. 30
6. 30	28. 30
7. 21	29. 20
7. 52	25. 20
8. 21	26. 10
8. 35	23. 30
8. 42	25. 0
9. 3	24. 50
9. 30	31. 30
9. 50	31. 50
10. 0	30. 30
10. 15	33. 50
11. 2	30. 55
11. 20	32. 10
11. 43	30. 20
11. 54	30. 30
12. 30	28. 40
12. 45	29. 25
13. 25	28. 10
13. 42	29. 35
14. 0	32. 0
14. 18	30. 0
14. 45	29. 10
15. 11	24. 30
	***
16. 0	24. 25
16. 22	25. 30
16. 45	24. 30
17. 2	25. 30
17. 18	23. 45
	***
18. 12	28. 30
18. 30	26. 30
18. 43	26. 30
	***
19. 7	24. 30
19. 15	26. 0
19. 40	25. 0
19. 44	26. 25
19. 56	25. 10

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
June 4	
h m	
0. 0	·1090
0. 25	·1108
0. 57	·1108
1. 25	·1129
1. 44	·1118
1. 54	·1129
2. 0	·1120
2. 11	·1126
2. 30	·1098
2. 51	·1128
3. 7	·1126
3. 30	·1135
3. 46	·1136
	***
4. 30	·1147
4. 48	·1218
5. 0	·1182
	***
5. 35	·1154
5. 59	·1164
6. 16	·1147
6. 32	·1160
7. 0	·1138
7. 13	·1148
7. 25	·1138
7. 35	·1136
8. 6	·1148
	***
9. 0	·1143
9. 11	·1163
	***
9. 44	·1147
10. 10	·1174
10. 15	·1166
10. 37	·1174
10. 50	·1155
11. 0	·1148
11. 15	·1154
11. 30	·1147
11. 43	·1156
11. 55	·1150
	***
13. 20	·1150
14. 7	·1158
15. 0	·1152
15. 26	·1160
	***
16. 55	·1163
	***
17. 40	·1140
	***
18. 39	·1138
19. 54	·1151
	***
21. 38	·1150
	***
22. 40	·1117
23. 0	·1118
23. 15	·1106
	(†)
June 5	
	(†)
1. 0	·1102*
3. 0	·1101*
5. 55	·1124
6. 15	·1151
6. 26	·1140
	***
7. 0	·1131
7. 30	·1141
7. 44	·1136
8. 0	·1138
8. 20	·1126
8. 40	·1129
9. 0	·1116
9. 44	·1113
10. 15	·1123
10. 45	·1112
12. 0	·1121
12. 25	·1114
13. 0	·1120
	***
13. 55	·1116
15. 0	·1124
15. 32	·1109
16. 11	·1118
17. 40	·1102
18. 41	·1096
	***
20. 55	·1097
21. 45	·1088
	***
23. 59	·1100

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
June 4	
h m	
0. 0	·02353
1. 13	·02220
3. 18	{ ·01877 { 02260
	***
5. 40	·01950
6. 58	·01950
8. 13	·02028
11. 11	·02440
20. 52	·02390
21. 58	·02316
23. 22	·02283
	(†)
June 5	
	(†)
1. 0	·02184*
3. 0	·01998*
5. 45	·01766
6. 12	·01817
6. 52	·01777
10. 30	·01710
12. 22	·01770
15. 21	·02167
16. 45	·02475
16. 58	·02430
17. 10	·02367
17. 30	·02417
23. 59	·02340

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
June 4		
h m	°	°
1. 0	72·3	73·0
3. 0	73·0	73·7
9. 0	71·0	71·6
21. 0	62·5	64·5
June 5		
1. 0	65·5	67·0
3. 0	67·4	68·6
9. 0	69·5	71·2
22. 15	62·4	64·4

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 5								
h m	° ′ ″	h m		h m		h m	°	
20. 11	21. 26. 0							
20. 22	24. 30							
20. 29	26. 30							
	***							
21. 0	26. 10							
21. 12	27. 10							
21. 57	27. 40							
22. 12	28. 40							
22. 45	30. 40							
23. 2	29. 45							
23. 22	31. 40							
23. 35	31. 10							
23. 59	31. 15							
June 6		June 6		June 6		June 6		
0. 0	21. 31. 15	0. 0	·1100	0. 0	·02340	9. 15	68 ·4	70 ·0
0. 40	31. 50		***	1. 36	·02208	21. 0	60 ·3	62 ·0
0. 44	33. 0	0. 45	·1108	3. 45	·01737			
1. 4	32. 30	1. 2	·1102	5. 12	·01760			
1. 43	34. 55	1. 17	·1102	8. 30	·01723			
2. 13	33. 20	1. 42	·1118	9. 30	·01738			
3. 14	33. 30	1. 55	·1103	13. 7	·02178			
3. 37	32. 40	2. 15	·1100	14. 13	·02400			
3. 44	33. 40	3. 40	·1104	14. 26	·02357			
4. 39	30. 40	3. 47	·1117		***			
	***	4. 1	·1108	21. 26	·02360			
5. 45	30. 20	4. 52	·1122	23. 59	·02196			
6. 0	29. 30	5. 10	·1116					
6. 45	28. 40		***					
7. 11	29. 30	6. 25	·1118					
8. 7	28. 30	6. 55	·1124					
8. 15	29. 25	7. 22	·1124					
8. 30	27. 30		***					
8. 40	28. 20	8. 10	·1126					
8. 56	26. 30	8. 33	·1130					
9. 15	27. 0	8. 42	·1125					
9. 33	24. 55	9. 3	·1130					
9. 42	27. 30	9. 15	·1124					
10. 6	24. 20	9. 33	·1132					
10. 15	24. 30	9. 45	·1116					
10. 31	21. 30	10. 2	·1118					
10. 40	23. 30	10. 20	·1110					
10. 50	22. 50	10. 45	·1117					
11. 15	24. 30	11. 10	·1108					
11. 29	27. 25		***					
11. 43	27. 10	12. 17	·1109					
11. 58	29. 0	12. 51	·1122					
12. 33	30. 0	13. 15	·1116					
12. 40	34. 45	13. 40	·1126					
13. 22	29. 45	14. 17	·1128					
13. 55	28. 10	15. 1	·1110					
14. 11	29. 30	15. 40	·1105					
14. 27	26. 30	16. 30	·1118					
14. 55	26. 0	17. 34	·1118					
15. 15	29. 20	17. 45	·1108					
15. 31	29. 20	19. 0	·1114					
15. 51	30. 45		***					
16. 7	29. 20	20. 15	·1096					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 6		June 6						
h m	° ′ ″	h m		h m		h m	°	
16. 15	21. 29. 30	21. 20	·1107					
16. 22	28. 10	22. 30	·1106					
16. 51	26. 30	22. 55	·1094					
17. 6	26. 30	23. 59	·1105					
17. 11	27. 30							
17. 24	27. 35							
17. 40	26. 0							
	***							
18. 51	25. 10							
18. 58	26. 30							
19. 25	26. 30							
19. 32	27. 30							
19. 44	26. 40							
19. 59	29. 50							
20. 11	28. 35							
20. 15	30. 0							
20. 34	27. 30							
21. 18	28. 0							
23. 0	33. 30							
23. 50	33. 30							
23. 59	34. 0							
June 7		June 7		June 7		June 7		
0. 0	21. 34. 0	0. 0	·1105	0. 0	·021[illegible]6	1. 0	64 ·4	66 ·2
1. 18	33. 30	0. 47	·1114	2. 16	·01666	3. 0	67 ·0	68 ·2
1. 33	35. 0	1. 25	·1118	3. 13	·01770	9. 0	67 ·0	69 ·0
2. 27	34. 20	1. 37	·1128	8. 22	·01693	21. 0	63 ·5	63 ·7
2. 41	35. 10	2. 8	·1126	10. 45	·01820			
3. 0	33. 25	2. 25	·1106	11. 25	·01864			
3. 14	33. 40	3. 0	·1106	13. 30	·02247			
3. 26	32. 30	3. 27	·1136		(†)			
3. 44	33. 20	4. 0	·1106	17. 24	·02373			
4. 13	30. 45	4. 55	·1124	19. 40	·02384			
5. 30	32. 30	5. 30	·1130	22. 11	·02067			
6. 5	28. 10	5. 52	·1120	23. 28	·01758			
6. 33	30. 20	6. 10	·1130		(†)			
7. 22	29. 40		***					
7. 52	22. 30	6. 55	·1131					
8. 15	28. 45	7. 4	·1139					
8. 36	27. 20	7. 22	·1125					
8. 50	30. 10	8. 0	·1134					
9. 7	27. 30	8. 58	·1116					
9. 45	27. 30	9. 30	·1121					
10. 12	30. 20	10. 0	·1122					
10. 30	26. 30	10. 25	·1126					
10. 41	26. 30	10. 40	·1146					
10. 52	22. 25	10. 48	·1135					
11. 15	30. 0	11. 0	·1143					
11. 26	26. 0	11. 14	·1142					
11. 41	25. 30	11. 22	·1128					
11. 57	30. 0	11. 40	·1122					
12. 26	23. 0	11. 55	·1132					
13. 13	31. 30	12. 14	·1110					
13. 39	28. 30	12. 25	·1118					
13. 54	27. 30	12. 47	·1107					
14. 7	28. 15	13. 13	·1124					
14. 13	26. 50		***					
14. 30	30. 0	14. 12	·1113					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 7		June 7						
h m	° ′	h m		h m		h m	°	°
14. 42	21. 29. 45	14. 30	·1122					
14. 57	32. 0	14. 39	·1114					
15. 30	30. 0	15. 15	·1121					
15. 54	28. 0		***					
	***	16. 0	·1117					
17. 11	29. 20		***					
17. 22	28. 0	16. 42	·1123					
17. 52	27. 10	17. 17	·1110					
	***	17. 55	·1114					
17. 56	29. 10		***					
	***	19. 4	·1096					
18. 36	24. 30		***					
18. 42	27. 10	19. 55	·1103					
	***	20. 25	·1101					
19. 21	26. 0		***					
	***	21. 30:	·1076					
19. 52	25. 50		***					
20. 6	23. 40	22. 25	·1081					
	***		***					
20. 30	25. 45	23. 15	·1089					
	***	23. 40	·1100					
21. 28	26. 30		(†)					
21. 40	28. 45							
21. 45	28. 30							
21. 55	30. 55							
22. 39	30. 0							
22. 42	31. 20							
22. 50	30. 0							
23. 12	32. 40							
23. 29	31. 40							
23. 44	32. 40							
23. 59	32. 30							
June 8		June 8		June 8		June 8		
0. 0	21. 32. 30		(†)	0. 0	·01717	1. 0	69 ·0	70 ·6
0. 23	33. 0	1. 20	·1095	2. 57	{ ·01893 ·01995	3. 0	71 ·6	73 ·5
1. 0	33. 50		***			9. 0	74 ·0	75 ·0
1. 12	32. 55	4. 45	·1095	6. 6	·01990	21. 0	69 ·8	68 ·8
1. 19	34. 0	5. 24	·1102	7. 40	·01830			
1. 50	34. 40	6. 5	·1126	9. 58	·01963			
1. 57	34. 0	6. 45	·1102	13. 19	·02604			
2. 7	34. 40	7. 6	·1110	20. 7	·02525			
2. 50	34. 30	7. 35	·1106	21. 27	·02380			
3. 14	32. 10		***	23. 36	·01927			
3. 29	33. 20	9. 25	·1106					
3. 52	31. 40	9. 55	·1109					
4. 30	31. 45	10. 10	·1113					
4. 45	30. 40		***					
5. 8	30. 45	11. 10	·1106					
5. 17	29. 20		***					
5. 36	29. 20	14. 5	·1102					
5. 51	26. 10	15. 47	·1118					
6. 18	28. 20	16. 40	·1103					
6. 52	27. 35	18. 14	·1112					
7. 11	28. 30	18. 45	·1098					
7. 38	28. 0	19. 40	·1094					
8. 7	28. 30	20. 6	·1080					
8. 50	26. 50	21. 19	·1085					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 8		June 8						
h m	° ′ ″	h m		h m		h m		
9. 52	21. 31. 10	22. 5	·1092					
10. 18	28. 20	23. 27	·1088					
10. 42	27. 30	23. 59	·1094					
11. 18	28. 45							
11. 43	28. 30							
13. 15	31. 0							
13. 40	30. 30							
14. 12	31. 0							
14. 16	31. 25							
14. 52	29. 50							
15. 17	29. 50							
15. 30	29. 0							
16. 12	29. 10							
16. 22	28. 0							
	***							
17. 39	28. 30							
18. 30	25. 0							
19. 15	24. 0							
20. 14	26. 30							
	***							
21. 40	28. 0							
21. 50	27. 0							
22. 0	29. 0							
22. 26	29. 30							
23. 4	33. 0							
23. 45	33. 0							
23. 59	34. 0							
June 9		June 9		June 9		June 9		
0. 0	21. 34. 0	0. 0	·1094	1. 0	·01739*	1. 0	72 ·5	74 ·0
0. 6	34. 0	0. 15	·1088	3. 0	·01836*	3. 0	75 ·5	76 ·7
	(†)	0. 38	·1096	9. 0	·01904*	9. 0	76 ·5	78 ·0
1. 0	33. 43*	0. 58	·1090	21. 0	·02477*	21. 0	66 ·0	67 ·6
2. 34	34. 10	1. 42	·1100					
3. 44	33. 45		***					
4. 30	31. 10	2. 45	·1098					
4. 56	30. 30	3. 5	·1104					
5. 30	28. 0	3. 30	·1103					
7. 19	28. 30	4. 30	·1106					
8. 21	27. 25	5. 8	·1095					
8. 40	24. 20	5. 32	·1106					
9. 0	24. 0	6. 13	·1104					
9. 20	27. 30	6. 21	·1094					
9. 24	27. 0	6. 47	·1092					
9. 41	29. 35	7. 7	·1097					
9. 51	29. 10	7. 30	·1092					
	(†)	8. 23	·1096					
13. 45	28. 10	8. 30	·1101					
14. 0	28. 20	8. 42	·1102					
14. 42	26. 30	8. 55	·1109					
16. 30	28. 0	9. 9	·1104					
16. 52	28. 45	9. 17	·1105					
18. 25	26. 20	9. 36	·1100					
18. 52	26. 30		***					
19. 11	26. 0	12. 40	·1100					
19. 33	24. 20	14. 30	·1109					
21. 48	24. 0		(†)					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

June 9. There was no Photographic Trace for the Vertical Force, owing to a failure in the paper.

Greenwich Mean Solar Time.	Western Declination.
June 9	
h m	° ′ ″
22. 12	21. 25. 0
	(†)
June 10	
0. 0	21. 30. 40
1. 11	31. 10
2. 6	33. 0
3. 10	31. 45
3. 39	32. 0
5. 19	31. 10
6. 8	29. 30
7. 36	29. 0
9. 29	27. 30
10. 42	29. 30
11. 0	28. 35
12. 30	28. 10
13. 39	26. 45
15. 22	27. 55
15. 52	26. 50
16. 43	26. 45
19. 33	22. 20
20. 10	22. 30
21. 37	26. 0
23. 59	35. 50
June 11	
0. 0	21. 35. 50
1. 56	37. 0
2. 11	36. 20
2. 18	36. 40
2. 40	34. 55
5. 36	29. 10
7. 0	28. 30
9. 28	28. 30
9. 42	25. 30
10. 0	26. 0
10. 14	27. 10
10. 52	26. 30
11. 57	29. 45
12. 28	28. 30
13. 31	29. 10
13. 45	28. 40
13. 54	29. 30
14. 22	27. 10
15. 12	29. 30
16. 0	31. 40
16. 45	27. 0
17. 43	24. 30
	***
19. 44	22. 30
19. 55	23. 0
20. 30	22. 10
21. 29	28. 0
23. 40	33. 50
23. 59	37. 20
June 12	
0. 0	21. 37. 20
0. 15	36. 45
0. 51	38. 20
1. 10	37. 30
1. 25	38. 5
1. 51	37. 40
2. 58	38. 10
3. 39	37. 40
4. 21	35. 0
4. 52	35. 0
5. 2	32. 20
5. 22	32. 0
5. 26	33. 0
5. 54	28. 25
6. 39	27. 45
6. 57	28. 40
7. 26	26. 10
8. 10	27. 55
8. 24	27. 20
10. 58	29. 20
11. 12	28. 50
12. 15	28. 30
12. 55	32. 10
13. 20	27. 10
13. 38	28. 40
14. 30	23. 30
15. 15	27. 0
15. 52	24. 25
16. 15	24. 10
16. 32	27. 20
16. 52	24. 25
17. 13	26. 55
17. 39	25. 35
17. 47	29. 40
18. 42	26. 0
18. 54	26. 45
19. 10	25. 20
19. 15	26. 45
19. 30	25. 40
19. 43	28. 0
20. 0	27. 20
20. 30	28. 20
20. 43	27. 25
21. 35	29. 50
22. 19	33. 20
22. 24	32. 50
22. 40	32. 45
23. 27	34. 30
23. 59	33. 40

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
June 9	
h m	
21. 0	·1111*
June 10	
0. 8	·1099
0. 45	·1093
1. 25	·1097
2. 5	·1088
2. 15	·1085
2. 25	·1075
2. 45	·1074
3. 32	·1081
3. 47	·1078
4. 55	·1076
5. 25	·1084
5. 55	·1084
6. 45	·1096
	***
10. 7	·1090
13. 40	·1089
	***
16. 10	·1094
19. 0	·1092
21. 0	·1071
21. 55	·1070
	***
23. 59	·1073
June 11	
0. 0	·1073
1. 30	·1084
2. 11	·1071
2. 25	·1078
2. 42	·1074
3. 31	·1083
4. 0	·1078
	***
4. 58	·1078
5. 10	·1082
5. 29	·1077
6. 30	·1089
7. 14	·1086
8. 45	·1090
9. 20	·1086
9. 55	·1101
10. 25	·1089
11. 45	·1098
13. 15	·1096
13. 55	·1104
14. 39	·1101
15. 15	·1102
15. 29	·1097
15. 53	·1097
16. 10	·1103
17. 13	·1106
18. 0	·1096
	***
20. 50	·1095
21. 6	·1088
	***
22. 30	·1080
23. 10	·1080
23. 30	·1085
	(†)
June 12	
0. 0	·1100
1. 45	·1102
2. 30	·1109
3. 0	·1109
3. 40	·1121
4. 22	·1108
	***
5. 1	·1108
5. 25	·1118
5. 55	·1098
6. 25	·1102
6. 50	·1117
	***
8. 10	·1106
8. 55	·1108
10. 10	·1106
12. 20	·1108
12. 55	·1116
13. 15	·1128
13. 40	·1119
14. 11	·1128
15. 0	·1117
15. 45:	·1124
	***
19. 0	·1117
	***
21. 5	·1112
21. 50	·1098
22. 45	·1090
23. 0	·1083
	***
23. 59	·1089

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
June 10	
0. 15	·02396
1. 10	·02380
2. 7	·02276
4. 13	·01807
6. 15	·01824
9. 14	·01780
11. 12	·01987
14. 11	·02610 ·02547
20. 43	·02496
21. 45	·02440
23. 59	·02070
June 11	
0. 0	·02070
1. 10	·01747
4. 20:	·01864
8. 15	·01810
10. 21	·01874
14. 21	·02656 ·02630
20. 56	·02618
22. 21	·02573
23. 22	02480
	(†)
June 12	
	(†)
1. 0	·0218[illegible]
1. 36	·02050
2. 40	·01783
5. 52:	·01866
9. 22	·01837
11. 0	·02007
14. 17	·02666 ·025[illegible]
14. 22	·02600
19. 28	·02555
20. 15	·02498
21. 45	·02407
23. 59	·02036

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
June 10		
1. 0	67 ·8	69 ·6
3. 0	71 ·0	72 ·3
9. 5	73 ·0	74 ·2
21. 0	66 ·5	67 ·2
June 11		
1. 0	71 ·0	72 ·0
3. 0	73 ·2	74 ·4
9. 0	75 ·2	76 ·0
21. 0	67 ·7	69 ·4
June 12		
1. 0	72 ·[illegible]	73 ·[illegible]
3. 0	74 ·[illegible]	74 ·[illegible]
9. 0	74 ·5	75 ·[illegible]
22. 15	73 ·0	74 ·[illegible]

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June13		June13		June13		June13		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 33. 40	0. 0	·1089	0. 0	·02036	8. 0	76·4	78·0
0. 56	32. 30		(†)	0. 55	·01807	21 ·0	70·6	71·8
2. 10	33. 45	3. 15	·1106	4. 22	·01916			
2. 43	32. 40		***	8. 26	·01847			
3. 52	31. 35	5. 0	·1126	11. 41:	·02065			
4. 39	28. 40	5. 50	·1121	15. 13	·02716			
6. 39	28. 45	6. 5	·1110		·02663			
6. 51	29. 30		***	20. 36	·02696			
7. 39	26. 10	7. 0	·1124	23. 59	·02347			
7. 45	27. 0	7. 25	·1114					
8. 30	24. 30	7. 42	·1123					
9. 0	26. 30	8. 0	·1114					
9. 27	26. 10	8. 47	·1117					
9. 52	26. 40	9. 20	·1112					
10. 36	26. 0		***					
11. 7	28. 5	10. 47	·1118					
12. 21	28. 40	11. 10	·1114					
13. 0	27. 50	13. 26	·1128					
13. 26	28. 40	15. 25	·1131					
13. 44	27. 30	16. 52	·1142					
13. 51	27. 50	18. 30	·1127					
14. 5	27. 10	21. 30	·1112					
15. 54	28. 20	22. 7	·1112					
16. 15	27. 25	23. 15	·1100					
16. 39	28. 0		(†)					
17. 10	27. 30							
17. 43	25. 0							
18. 9	24. 20							
18. 39	22. 15							
18. 56	24. 0							
19. 21	24. 55							
19. 43	27. 0							
20. 16	26. 0							
21. 3	26. 55							
21. 45	26. 50							
23. 12	32. 0							
23. 59	35. 20							
June14		June14		June14		June14		
0. 0	21. 35. 25		(†)	0. 0	·02347	1. 0	76·7	77·0
0. 34	36. 50	1. 0	·1107*	1. 48	·02022	3. 0	77·6	79·5
		1. 7	·1102	2. 30	·01859	9. 0	81·0	82·0
1. 0	34. 20*	3. 45	·1102		·02300	21. 0	74·2	73·7
1. 28	34. 30	4. 55	·1108	3. 38	·02038			
2. 5	35. 0	5. 15	·1103	5. 45	·01927			
3. 40	32. 0	5. 59	·1103	5. 52	·01976			
5. 36	28. 30	6. 45	·1109	6. 40	·01907			
6. 12	28. 50	7. 40	·1099	7. 55	·01860			
6. 51	28. 20	8. 15	·1090	10. 24	·02050			
8. 22	27. 0	9. 14	·1105	13. 18	·02683			
9. 40	28. 45	9. 38	·1120	13. 29	·02650			
10. 15	26. 40		***	18. 51	·02583			
10. 40	27. 15	10. 25	·1126	20. 38	·02626			
11. 15	24. 25	10. 54	·1114	22. 36	·02364			
11. 39	24. 0	12. 6	·1106		·02283			
11. 59	27. 10	13. 0	·1112	23. 59	·02320			
13. 26	28. 35	14. 20	·1116					
14. 30	28. 40	15. 0	·1111					
16. 12:	30. 20	16. 10	·1120					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June14		June14						
h m	° ′ ″	h m		h m		h m	°	°
18. 11	21. 25. 0	18. 2	·1113					
18. 44	25. 50	19. 0	·1095					
19. 43	25. 20	19. 30	·1094					
21. 40	29. 0	20. 0	·1086					
22. 12	29. 0	20. 54	·1082					
23. 59	32. 15	22. 45	·1086					
		23. 24	·1085					
		23. 59	·1081					
June15		June15		June15		June15		
0. 0	21. 32. 15	0. 0	·1081	0. 0	·02320	1. 0	80·6	80·8
0. 36	33. 30	0. 40	·1087	1. 0	·01887	3. 0	83·0	83·0
2. 12	33. 30	1. 0	·1085	1. 52	·01913	9. 0	82·3	83·5
3. 7	31. 50	2. 10	·1104	4. 30	·01847	21. 4	76·0	74·6
3. 30	32. 10	4. 14	·1104	8. 51	·02220			
4. 12	31. 0	5. 0	·1108	10. 50	·02650			
4. 42	30. 40		***		·02590			
6. 22	27. 0	6. 7	·1098	15. 45	·02507			
7. 40	27. 25		***	20. 11	·02520			
7. 52	26. 30	7. 0	·1102	23. 59	·01886			
8. 52	28. 35		***					
13. 29	29. 0	8. 5	·1118					
14. 31	28. 5	8. 28	·1114					
15. 18	30. 0		***					
17. 28	25. 30	10. 10	·1122					
18. 45	24. 35		***					
19. 58	25. 25	11. 40	·1120					
20. 30	26. 30		***					
21. 5	26. 0	15. 12	·1124					
22. 10	28. 30	16. 25	·1131					
22. 40	30. 25	17. 15	·1126					
22. 47	30. 15	18. 6	·1129					
23. 24	32. 0	19. 0	·1108					
23. 59	33. 10	19. 26	·1112					
		20. 0	·1097					
		20. 55	·1086					
		23. 15	·1071					
		23. 33	·1075					
		23. 50	·1068					
		23. 59	·1070					
June16		June16		June16		June16		
0. 0	21. 33. 10	0. 0	·1070	0. 0	·01886	1. 0	81·0	82·3
0. 10	33. 25	0. 13	·1072	0. 27	·01730	3. 0	83·5	85·0
0. 45	32. 15	0. 30	·1069	1. 15	·01806	9. 0	85·0	85·5
1. 54	32. 30		***	3. 14	·01833	21. 0	73·3	74·8
2. 40	31. 30	1. 25	·1083		·02100			
2. 51	32. 0		***	6. 15	·01850			
4. 9	30. 0	3. 45	·1078	6. 52	·01893			
5. 13	29. 40	4. 6	·1090	7. 53	·01833			
7. 7	27. 35	4. 40	·1090	9. 39	·01987			
7. 22	28. 10	4. 50	·1138	11. 33	·02323			
9. 12	27. 30		***	13. 0	·02350			
9. 33	26. 10	6. 6	·1146	14. 57	·02327			
9. 59	25. 20	6. 28	·1155	21. 13	·02330			
10. 22	27. 0		***	23. 0	·02287			
	***	8. 10	·1156		(†)			
12. 58	27. 55		***					
	***							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 16		June 16						
h m	° ′ ″	h m		h m		h m	°	°
14. 39	21. 26. 10	10. 0	·1144					
14. 53	23. 30	10. 7	·1148					
15. 40	28. 30	10. 14	·1142					
15. 56	28. 10	10. 20	·1148					
16. 47	31. 30	10. 30	·1142					
17. 7	30. 0	10. 38	·1150					
17. 21	31. 0		***					
17. 55	28. 30	11. 39	·1148					
18. 21	27. 0	11. 45	·1140					
18. 30	25. 0	11. 52	·1148					
18. 38	25. 30	12. 40	·1145					
19. 6	23. 30	12. 55	·1151					
19. 22	23. 40	13. 15	·1151					
19. 41	23. 10	13. 45	·1156					
20. 15	25. 50	14. 38	·1155					
20. 28	24. 20	14. 54	·1145					
21. 12	28. 30	15. 15	·1145					
21. 29	28. 25	15. 30	·1150					
22. 13	29. 30	16. 23	·1144					
23. 0	35. 55		***					
23. 40	35. 40	17. 40:	·1152					
23. 59	34. 55		***					
		19. 50	·1138					
		20. 30	·1132					
		23. 59	·1124					
June 17		June 17		June 17		June 17		
0. 0	21. 34. 55	0. 0	·1124		(†)	1. 0	74·5	75·8
0. 43	33. 0	0. 35	·1114	1. 0	·02269*	3. 0	75·4	77·0
1. 5	34. 0	1. 0	·1112	1. 43	·02254	9. 18	73·5	74·5
1. 36	33. 20	1. 50	·1125	5. 0	·02222	21. 0	62·0	64·0
2. 19	33. 40		***	9. 13	·02396			
3. 0	31. 15	2. 54	·1124		·02343			
3. 14	31. 50	3. 10	·1130	12. 45	·02273			
3. 39	30. 0	3. 25	·1124	13. 13	·02239			
4. 53	29. 20	3. 51	·1134	19. 30	·02317			
5. 52	31. 0	4. 10	·1128	21. 52	·02307			
6. 11	30. 30	4. 45	·1140	23. 21	·02233			
6. 23	30. 50		***	23. 59	·02210			
6. 39	29. 35	5. 10	·1135					
6. 52	30. 10	5. 18	·1146					
7. 44	30. 0	5. 25	·1140					
8. 7	28. 30	5. 33	·1148					
8. 22	29. 20	6. 7	·1129					
	(†)	6. 15	·1134					
9. 18	27. 13*	6. 25	·1131					
10. 52	29. 15	6. 40	·1145					
11. 15	26. 20	7. 10	·1135					
13. 52	27. 0	7. 40	·1140					
14. 39	29. 40	8. 12	·1124					
15. 15	27. 0	8. 29	·1138					
16. 12	29. 40	9. 27	·1134					
17. 0	30. 0		***					
17. 40	28. 20	12. 32	·1144					
19. 54	28. 35	12. 55	·1157					
20. 30	30. 0	13. 26	·1148					
21. 12	33. 0	14. 15	·1154					
	(†)	16. 18	·1155					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 17		June 17						
h m	° ′ ″	h m		h m		h m	°	°
23. 40	21. 33. 45	17. 14	·1159					
23. 50	34. 0	18. 40	·1151					
23. 59	33. 0	20. 7	·1153					
		21. 15	·1146					
		23. 59	·1131					
June 18		June 18		June 18		June 18		
0. 0	21. 33. 0	0. 0	·1131	0. 0	·02210	1. 0	64·0	66·0
1. 45	34. 30	0. 15	·1134	4. 45	·01639	3. 0	65·5	67·0
2. 40	33. 20	0. 29	·1125	8. 55	·01437	9. 0	66·0	67·5
3. 39	32. 40	0. 40	·1127	12. 52	·01706	21. 0	63·7	63·4
4. 39	30. 40	1. 15	·1116	16. 29	·02027			
5. 29	30. 30	1. 30	·1116	20. 15:	·02180			
7. 26	27. 45	1. 55	·1114	22. 53	·01887			
8. 25	29. 20	4. 10	·1141		(†)			
9. 14	29. 20	4. 55	·1148					
9. 37	28. 30	5. 10	·1142					
9. 42	28. 50	5. 19	·1143					
10. 3	28. 0	5. 35	·1140					
10. 15	28. 30	5. 50	·1144					
12. 47	27. 30	6. 55	·1134					
14. 52	27. 35	7. 28	·1142					
15. 1	28. 45	8. 25	·1141					
15. 39	26. 5		***					
15. 52	26. 20	11. 0	·1149					
16. 22	30. 40	11. 20	·1147					
16. 29	31. 50		***					
16. 38	31. 25	15. 0	·1152					
16. 50	35. 0	16. 0	·1147					
17. 15	35. 0	16. 55	·1149					
18. 10	27. 0	17. 17	·1161					
18. 59	23. 30	18. 14	·1156					
19. 14	23. 40	19. 25	·1133					
19. 45	21. 30	20. 0	·1130					
	***		***					
20. 42	21. 30	21. 55	·1100					
21. 51	24. 30	22. 25	·1104					
21. 59	24. 0	22. 45	·1093					
22. 12	25. 30	23. 59	·1097					
22. 20	25. 25							
22. 57	29. 25							
23. 45	31. 40							
23. 59	30. 50							
June 19		June 19		June 19		June 19		
0. 0	21. 30. 50	0. 0	·1097		(†)	1. 0	68·5	69·0
0. 39	33. 0	0. 15	·1096	1. 0	·01427*	3. 0	71·0	71·0
1. 57	33. 40	1. 0	·1076	2. 42	·01480	9. 0	72·2	73·4
2. 15	35. 10	2. 17	·1106	3. 42	·01520	22. 36	67·3	67·5
3. 12	34. 30	2. 51	·1090	6. 43	·01520			
3. 29	35. 20	3. 15	·1094	8. 30:	·01472			
4. 15	34. 10	3. 55	·1120	12. 26	·01822			
4. 51	30. 20	4. 25	·1105	12. 43	·01810			
5. 40	32. 45	4. 50	·1119	15. 7	·02260			
7. 10	30. 25	5. 15	·1101		·02190			
7. 30	31. 0	5. 42	·1104	18. 39	·02300			
8. 10	29. 50	6. 0	·1115	20. 43	·02308			
8. 45	30. 20	6. 15	·1108	23. 59	·01957			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 19		June 19						
h m	° ′ ″	h m		h m		h m	°	°
9. 14	21. 29. 20	7. 0	·1120					
9. 30	30. 15	7. 35	·1110					
9. 52	28. 45	8. 10	·1114					
10. 10	29. 40	8. 30	·1124					
10. 22	29. 10	9. 1	·1115					
10. 39	29. 30	9. 20	·1119					
10. 51	28. 45		***					
11. 22	28. 0	10. 33	·1126					
12. 6	33. 0	11. 30	·1121					
12. 40	28. 0	12. 7	·1147					
12. 49	28. 35	12. 42	·1118					
13. 21	24. 0	13. 0	·1118					
13. 41	26. 0	14. 0	·1134					
13. 51	25. 45	14. 31	·1131					
14. 11	29. 10	14. 44	·1124					
14. 21	29. 10	15. 6	·1128					
14. 30	32. 5	15. 28	·1121					
14. 36	32. 0	16. 30	·1132					
14. 40	32. 55		***					
15. 12	25. 0	17. 40	·1132					
15. 24	24. 30	18. 10	·1142					
16. 11	26. 25	19. 0	·1136					
17. 0	23. 0	20. 0	·1120					
17. 4	23. 50	20. 39	·1120					
17. 50	20. 30	22. 45	·1086'					
17. 54	21. 50	22. 56	·1097					
18. 11	24. 0	23. 20	·1096					
18. 27	25. 0	23. 30	·1092					
18. 43	23. 35	23. 59	·1114					
19. 3	26. 0							
19. 43	27. 50							
20. 25	25. 30							
20. 51	28. 20							
21. 21	28. 0							
21. 30	29. 20							
22. 28	34. 0							
22. 47	33. 30							
23. 13	34. 30							
23. 26	37. 0							
23. 59	33. 30							
June 20		June 20		June 20		June 20		
0. 0	21. 33. 25	0. 0	·1114	0. 0	·01957	8. 2	72 ·2	72 ·7
0. 12	33. 0	0. 15	·1130	1. 43	·01527	21. 0	68 ·0	67 ·0
0. 24	34. 30	0. 38	·1120	3. 12	·01596			
0. 55	36. 0	1. 35	·1116	8. 0	·01520			
1. 21	38. 30	1. 44	·1102	9. 52	·01595			
1. 40	37. 50	1. 58	·1114	11. 28	·01707			
1. 45	35. 30	2. 11	·1113	14. 15	·02100			
1. 51	36. 20	2. 31	·1104	15. 50	{ ·02422 ·02356			
2. 7	33. 50	2. 55	·1124					
2. 22	33. 45	3. 4	·1115	19. 53	·02350			
2. 41	32. 0	3. 15	·1122	20. 0	·02315			
2. 52	32. 30	3. 28	·1114	20. 45	·02337			
3. 7	31. 40	3. 57	·1131	23. 59	·01897			
3. 15	32. 45	4. 25	·1129					
3. 31	32. 0	4. 52	·1132					
	***	5. 15	·1123					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 20		June 20						
h m	° ′ ″	h m		h m		h m	°	°
3. 51	21. 33. 20	5. 45	·1131					
4. 40	32. 45	6. 25	·1129					
4. 43	32. 20	6. 51	·1132					
5. 10	30. 5	7. 30	·1127					
8. 11	29. 30	8. 14	·1131					
8. 24	30. 5	9. 25	·1130					
9. 25	29. 40	9. 40	·1144					
9. 40	23. 0	10. 0	·1129					
9. 51	29. 0	10. 41	·1129					
10. 11	28. 45	11. 24	·1140					
10. 53	31. 40	11. 55	·1130					
11. 50	25. 45		***					
12. 28	29. 30	13. 10	·1132					
12. 52	29. 0	13. 15	·1128					
13. 10	28. 0		***					
13. 27	28. 30	15. 15	·1122					
13. 43	28. 30	15. 45	·1124					
13. 57	30. 0	16. 15	·1131					
14. 36	28. 20	18. 15	·1126					
	***	18. 54	·1114					
15. 12	29. 30	19. 30	·1121					
15. 22	28. 40	23. 0	·1082					
15. 45	30. 20	23. 27	·1084					
16. 46	26. 20	23. 31	·1089					
16. 58	26. 30	23. 59	·1087					
17. 18	24. 30							
17. 40	24. 0							
17. 56	24. 30							
18. 15	24. 0							
19. 12	23. 30							
19. 38	25. 0							
20. 45	25. 30							
22. 12	28. 20							
23. 15	32. 0							
23. 59	32. 55							
June 21		June 21		June 21		June 21		
0. 0	21. 32. 55	0. 0	·1087	0. 0	·01897	1. 0	71 ·6	72 ·0
1. 18	34. 0	2. 5	·1090	1. 45	·01844	3. 0	74 ·0	74 ·8
2. 51	31. 20	2. 30	·1086	3. 0	·01873	9. 0	74 ·0	75 ·5
3. 51	30. 30	3. 45	·1090	4. 33	·01844	21. 0	67 ·9	68 ·4
4. 56	28. 20	4. 7	·1086	7. 26	·01840			
6. 14	28. 0	5. 0	·1098	9. 28	·02017			
	***	5. 39	·1099	12. 15	{ ·02577 ·02527			
6. 50	28. 40	5. 45	·1118					
	***	6. 15	·1118	18. 52	·02450			
8. 21	28. 10	6. 50	·1113	21. 0	·02452			
10. 0	29. 20		***	22. 9	·02356			
10. 39	28. 30	8. 42	·1112	23. 59	·01987			
11. 56	29. 20	9. 22	·1114					
13. 22	28. 35	10. 0	·1126					
14. 29	29. 20	11. 17	·1125					
14. 51	28. 30		***					
15. 51	27. 30	17. 20	·1142					
16. 46	28. 20	17. 56	·1155					
	***		***					
18. 55	22. 30	18. 15	·1154					
19. 31	23. 50	18. 48	·1148					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. of H. F. Magnet.	Readings of Thermometers. of V. F. Magnet.
June 21		June 21						
h m	° ′ ″	h m		h m		h m	°	°
19. 46	21. 22. 30	19. 22	·1149					
20. 11	26. 0	19. 54	·1142					
20. 41	26. 5	21. 17	·1131					
21. 21	27. 30	22. 6	·1129					
21. 58	28. 0	22. 25	·1123					
23. 25	33. 25	22. 45	·1128					
23. 30	34. 50	23. 59	·1118					
23. 59	34. 0							
June 22		June 22		June 22		June 22		
0. 0	21. 34. 0	0. 0	·1118	0. 0	·01987	1. 0	73 ·0	74 ·4
0. 30	33. 20	1. 5	·1118	0. 43	·01758	3. 0	76 ·0	77 ·6
1. 52	33. 40	2. 30	·1108	2. 14	·01843	9. 0	79 ·5	79 ·5
3. 59	30. 0	4. 0	·1121	4. 43	·01888	21. 0	69 ·0	70 ·4
4. 37	29. 40	4. 52	·1140	7. 39	·01858			
4. 51	30. 0	5. 35	·1114	8. 22	·01867			
5. 10	29. 0	5. 59	·1118	9. 34	·01984			
5. 22	29. 40	6. 15	·1114	12. 0	·02360			
5. 40	29. 30	6. 50	·1162	12. 22	·02387			
6. 0	29. 50		***	12. 56	·02490			
6. 37	29. 20	8. 26	·1156		·02465			
6. 54	29. 0	9. 25	·1160	14. 52	·02487			
7. 11	30. 50	9. 47	·1148	18. 43	·02450			
7. 45	29. 45		***	19. 13	·02413			
9. 21	31. 0	11. 2	·1154	20. 15	·02412			
9. 59	17. 0	11. 16	·1161	20. 58	·02453			
10. 22	25. 20	11. 38	·1152	23. 59	·02160			
10. 51	30. 40	12. 0	·1162					
11. 56	32. 50	12. 39	·1151					
12. 13	28. 30	12. 55	·1160					
12. 56	21. 50	13. 13	·1160					
13. 16	22. 20	13. 42	·1163					
13. 35	26. 15	14. 20	·1158					
13. 57	25. 40	14. 26	·1178					
14. 21	27. 20	14. 34	·1167					
14. 27	31. 50	15. 2	·1178					
14. 39	26. 55		***					
14. 56	24. 30	16. 55	·1171					
15. 1	26. 0	17. 15	·1158					
15. 12	23. 45	17. 30	·1162					
15. 16	24. 50	18. 10	·1098					
15. 21	23. 55	18. 25	·1076					
15. 26	25. 50	19. 25	·1170					
15. 36	24. 30	19. 44	·1162					
15. 45	22. 10	20. 9	·1132					
15. 57	23. 0	20. 45	·1148					
16. 13	22. 0	21. 32	·1136					
16. 29	23. 50	22. 0	·1118					
17. 12	24. 30	22. 30	·1108					
17. 40	31. 30	23. 0	·1100					
17. 45	33. 40	23. 30	·1112					
17. 51	33. 40	23. 59	·1106					
18. 11	32 .10							
18. 30	53. 20							
18. 47	45. 30							
18. 51	47. 0							
19. 14	40. 30							
19. 42	37. 55							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. of H. F. Magnet.	Readings of Thermometers. of V. F. Magnet.
June 22								
h m	° ′ ″	h m		h m		h m		
19. 45	21. 40. 50							
20. 16	32. 30							
20. 38	28. 10							
20. 45	30. 30							
21. 10	28. 30							
21. 27	29. 30							
21. 40	27. 45							
22. 14	38. 40							
22. 25	36. 30							
22. 29	37. 0							
22. 51	34. 20							
22. 56	36. 30							
23. 21	36. 0							
23. 50	37. 55							
23. 59	38. 0							
June 23		June 23		June 23		June 23		
0. 0	21. 38. 0	0. 0	·1105	0. 0	·02160	1. 0	74 ·6	75 ·6
0. 29	37. 55	0. 35	·1110	1. 22	·01824	3. 0	76 ·5	77 ·6
0. 55	35. 40	0. 44	·1102	2. 28	·01847	9. 0	77 ·7	79 ·2
2. 0	34. 40	1. 17	·1126	4. 30	·02038	21. 0	68 ·6	71 ·5
2. 14	35. 20	1. 40	·1125	5. 15	·01994			
2. 30	34. 20	2. 10	·1138	6. 29	·02020			
2. 52	36. 40		(†)	7. 18	·01963			
3. 0	36. 50	3. 0	·1143*	7. 40	·01990			
3. 25	41. 40	5. 45	·1176	8. 13	·01938			
3. 36	39. 0	6. 15	·1155	9. 7	·01960			
3. 45	43. 20	6. 29	·1180	9. 43	·01877			
4. 12	17. 50	7. 10	·1177	10. 58	·01960			
5. 14	36. 50	7. 29	·1140	11. 51	·02074			
5. 20	36. 0		***	12. 15	·02046			
5. 45	39. 55	8. 25	·1122	14. 29	·02537			
6. 45	27. 0		***		·02480			
6. 51	27. 35	9. 9	·1125	15. 13	·02420			
7. 4	25. 0	9. 27	·1111	15. 29	·02440			
7. 11	26. 30	9. 43	·1110	15. 59	·02410			
7. 13	25. 10	9. 46	·1136	16. 28	·02437			
7. 17	26. 15	9. 47	·1132	17. 0	·02370			
7. 40	22. 10	10. 2	·1167	18. 7	·02417			
7. 48	24. 55	10. 25	·1136	21. 22	·02495			
8. 0	20. 30	10. 45	·1116	23. 59	·02528			
8. 13	24. 10	11. 0	·1086					
8. 29	14. 30	11. 11	·1097					
8. 39	22. 50	11. 39	·1103					
8. 48	22. 30	11. 58	·1133					
8. 56	29. 0	12. 10	·1097					
9. 2	27. 10	12. 26	·1113					
9. 21	37. 40	12. 41	·1102					
9. 56	1. 0	12. 55	·1124					
10. 40	29. 30	13. 14	·1114					
10. 45	28. 30	13. 31	·1134					
10. 55	32. 30	13. 48	·1122					
11. 4	23. 30	14. 12	·1116					
11. 7	32. 0	14. 41	·1126					
11. 15	27. 5	15. 9	·1098					
11. 21	30. 40	15. 27	·1119					
11. 53	18. 10	15. 59	·1092					
12. 11	21. 30	16. 30	·1132					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 23		June 23						
h m	° ′ ″	h m		h m		h m	°	°
12. 21	21. 16. 10	17. 26	·1124					
12. 24	16. 50	18. 5	·1108					
12. 28	16. 25	18. 25	·1098					
12. 40	23. 40	18. 57	·1106					
12. 53	20. 10	19. 12	·1114					
13. 20	25. 20		***					
13. 38	26. 0	19. 50	·1112					
14. 9	37. 20	20. 14	·1102					
14. 19	37. 30	20. 31	·1104					
14. 39	45. 10	20. 42	·1096					
15. 25	36. 0	20. 53	·1097					
15. 45	42. 0		(†)					
16. 10	33. 30	21. 0	·1083*					
16. 30	28. 45							
16. 40	29. 40							
16. 44	28. 10							
17. 10	34. 0							
17. 16	33. 45							
17. 38	37. 0							
17. 52	34. 30							
18. 0	37. 0							
18. 39	33. 50							
18. 50	35. 50							
19. 7	35. 20							
19. 43	38. 50							
19. 56	37. 20							
20. 3	37. 40							
20. 15	34. 30							
20. 26	33. 30							
	(†)							
21. 0	31. 14*							
23. 42	40. 30							
23. 59	38. 30							
June 24		June 24		June 24		June 24		
0. 0	21. 38. 30	0. 0	·1087	0. 0	·02528	1. 0	70·0	71·6
0. 26	37. 5	0. 30	·1088	1. 57	·02600	3. 0	71·4	72·5
0. 30	38. 20	1. 30	·1107		***	9. 0	68·8	71·0
	***	1. 40	·1103	4. 25	·02595	21. 0	64·2	64·0
1. 0	36. 40	2. 0	·1120	5. 42	·02516			
1. 10	37. 15	2. 24	·1118	6. 11	·02537			
1. 28	36. 45	2. 33	·1126	7. 30	·02407			
1. 43	34. 40	2. 59	·1101	9. 6	·02446			
1. 57	35. 30	3. 20	·1119	9. 43	{ ·02526			
	***	3. 37	·1140		{ ·02437			
2. 27	33. 35	3. 45	·1108	10. 37	·02417			
	***	3. 59	·1126	11. 21	·02313			
3. 26	32. 30	4. 0	·1120	11. 44	·02386			
3. 36	35. 30	4. 15	·1166	12. 12	·02324			
3. 46	33. 30	4. 26	·1110	13. 26	·02330			
3. 58	34. 30	4. 40	·1137	13. 30	·02300			
4. 9	38. 45	4. 45	·1122	13. 51	·02322			
4. 22	33. 20	5. 5	·1148	15. 43	·02364			
4. 34	36. 30	5. 12	·1136	17. 29	·02351			
4. 44	35. 0	5. 26	·1135	21. 10	·02437			
4. 50	37. 30	5. 39	·1144	23. 59	·02308			
4. 56	32. 30	5. 55	·1127					
5. 0	36. 15	6. 8	·1135					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 24		June 24						
h m	° ′ ″	h m		h m		h m	°	°
5. 26	21. 30. 40	6. 29	·1166					
5. 44	33. 30	6. 36	·1156					
5. 53	27. 0		***					
6. 4	27. 0	7. 3	·1176					
6. 13	22. 30	7. 16	·1162					
	***	7. 35	·1134					
6. 20	22. 30	7. 45	·1136					
6. 26	23. 50	7. 55	·1121					
6. 43	21. 25	8. 8	·1125					
6. 47	23. 0		***					
6. 52	21. 20	8. 42	·1115					
7. 0	23. 40		***					
7. 8	21. 40	9. 16	·1110					
7. 22	26. 40	9. 55	·1116					
7. 39	21. 30	10. 12	·1110					
7. 45	23. 30	10. 36	·1110					
7. 56	21. 30	11. 0	·1116					
8. 2	21. 30	11. 38	·1087					
8. 15	19. 20	12. 1	·1147					
8. 32	21. 30	12. 24	·1124					
9. 15	15. 50	12. 45	·1124					
9. 52	24. 55	13. 0	·1144					
10. 7	25. 30	13. 31	·1154					
10. 30	22. 0		***					
10. 40	23. 40	14. 34	·1156					
10. 55	19. 30	15. 16	·1120					
11. 11	27. 20	15. 45	·1136					
11. 14	26. 30	16. 11	·1136					
11. 27	21. 30	16. 30	·1144					
11. 43	22. 0	16. 55	·1140					
12. 0	29. 30		***					
12. 39	20. 20	17. 42	·1117					
13. 17	22. 30		***					
13. 40	24. 30	18. 26	·1124					
13. 52	22. 30	18. 48	·1102					
14. 7	21. 50	19. 7	·1096					
14. 22	23. 30	19. 40	·1125					
14. 33	23. 30	20. 2	·1110					
14. 56	30. 40	20. 51	·1098					
15. 30	37. 30	21. 30	·1094					
15. 40	36. 30	21. 39	·1087					
16. 16	37. 20	21. 46	·1094					
16. 51	32. 20		***					
16. 54	32. 30	22. 50	·1094					
17. 6	31. 0	23. 0	·1105					
17. 15	31. 30		***					
17. 40	36. 45	23. 59	·1108					
17. 51	35. 10							
18. 10	35. 10							
18. 22	33. 30							
18. 30	34. 35							
18. 52	34. 20							
19. 18	25. 0							
19. 22	28. 55							
19. 27	28. 45							
19. 39	30. 30							
19. 56	30. 40							
20. 29	34. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 24								
h m	° ′ ″	h m		h m		h m	°	°
20.34	21.34.30							
21. 9	32.40							
21.32	32. 0							
21.45	34.20							
22. 5	32.30							
22.35	33. 0							
22.58	28.55							
23.14	31. 0							
23.20	30.50							
23.40	33.30							
23.45	33.10							
23.53	34.30							
23.59	34. 0							
June 25		June 25		June 25		June 25		
0. 0	21.34. 0	0. 0	·1108	0. 0	·02308	1. 0	67·0	68·0
	***	0. 9	·1110	2.58	·01707	3. 0	69·0	70·0
0.36	32.35	1.17	·1125	5.36	·01785	9. 0	72·0	73·0
1.11	32.25	1.41	·1123	8.13	·01737	21. 0	68·0	66·0
1.57	34.30	1.55	·1127	10.44:	·01780			
2.13	34.30		***	15.29	·02537			
2.43	32.30	2.30	·1118		·02466			
3. 4	32.30		***	19.29	·02430			
3.22	31.20	3.47	·1117	20.40	·02470			
4.59	30.40	4.30	·1124	22.10	·02400			
5.15	27.40	5.24	·1143	23.59	·02100			
6.18	29.30	6.17	·1132					
7.43	29.45		***					
10. 9	26. 0	7. 5	·1139					
10.28	27.30	7.40	·1132					
10.45	26.35	8. 0	·1136					
12. 0	29.20		***					
12.40	27.55	8.55	·1129					
15.28	27.30	10. 0	·1141					
15.56	29.45	11.18	·1142					
16.15	30. 0	12. 0	·1150					
16.30	31.40	13.30	·1152					
16.54	30.30	15.20	·1170					
17.26	32.55	15.39	·1168					
17.54	31.30	16.24	·1172					
18. 0	32.30	17.20	·1165					
18.15	31.30		***					
18.22	32.55	18.54	·1127					
18.38	32.20	19.40	·1147					
18.58	34.45	20. 8	·1142					
19.36	32.30	21. 0	·1146					
19.47	32.30		***					
20. 0	31.10	23.59	·1124					
20.23	31.15							
20.40	29.50							
21.30	28.30							
23. 2	31.35							
23.59	31.40							
June 26		June 26		June 26		June 26		
0. 0	21.31.40	0. 0	·1123	0. 0	·02100	1. 0	72·6	73·0
	***	0.30	·1117	1. 0	·01796	3. 0	75·4	76·6
1.43	31.45	0.55	·1123	2.14	·01879	9. 0	75·6	77·2

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 26		June 26		June 26		June 26		
h m	° ′ ″	h m		h m		h m	°	°
2. [illegible]	21.32.30	1.3[illegible]:	·1114	8.22	·018[illegible]	22.20	64·0	65·[illegible]
2.28	31.25		***	1[illegible].14	·01940			
3.48	31.15	5.14	·1154	14.10	·02[illegible]			
4.13	30. 0	5.48	·1156		·02[illegible]			
4.39	30. 5	6. 8	·1148	20.22	·02480			
5.12	28.30	6.31	·1158	23.59	·02447			
5.21	28.55	7. 0	·1161					
5.43	28.10	7.15	·1151					
5.51	28.30	8.40	·1144					
6.28	25.30	10.45	·1142					
6.39	26.20	12.45	·1148					
6.50	24.30	13.41	·1146					
8.20	29.45	14.25	·1154					
9.43	30. 0	15.15	·1155					
11.30	28.50	16. 0	·1164					
11.50	27.45	17.30:	·1166					
13.13	25.30	18.50	·1152					
13.53	28.20	19.25	·1154					
16. 4	26.25	20. 4	·1142					
16.43	23.10	21. 0	·1147					
17. 4	22.30	22.26	·1142					
19.15	24. 0	22.45	·1147					
19.40	23.30	23.59	·1154					
20. 7	26.30							
21. 4	26.30							
23.59	32.45							
June 27		June 27		June 27		June 27		
0. 0	21.32.45	0. 0	·1155	0. 0	·02447	8.19	66·8	68·0
1.13	34.30	1.28	·1165	1.14	·02473	21. 0	[illegible]1·8	63·4
1.58	32.40	2.14	·1184	3.18	·02440			
2.42	32.45	2.27	·1182	7. 4	·02274			
3.11	33.50	3.14	·1187	8.52	·02279			
4.15	30.45	3.30	·1181	12.45	·025[illegible]			
5.53	29.50	3.46	·1185		·02478			
8.15	29.20	4.35	·1178	22. 0	·024[illegible]			
12. 7	29.50		***	23.59	·02544			
12.17	30.40	6.30	·1193					
12.57	29.45	6.55	·1186					
13.53	27. 0	7.40	·1193					
14.23	25.30	8.55	·1192					
14.45	26.40	9.45	·1199					
15.19	26.15		***					
15.53	27.45	12.58	·1202					
15.58	27.15	13.28	·12[illegible]8					
16.19	28. 0	14.25	·12[illegible]4					
16.43	26.20		***					
16.50	26.50	15. 5	·12[illegible]7					
17.42	24.50	15.52	·120[illegible]					
18.27	26. 0	16.17	·12[illegible]					
19. 0	25.30	17.35:	·1210					
19.37	27. 0		***					
20.12	27.40	18.50	·11[illegible]5					
20.30	28.35	19.15	·1196					
21.30	30. 0		***					
22.21	29.20	21. 7	·1182					
23.59	31.40	23. 0	·1172					
		23.59	·1175					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet
June 28		June 28		June 28		June 28		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 31. 40	0. 0	·1175	0. 0	·02344	1. 0	65 ·7	67 ·0
0. 17	32. 15	0. 45	·1178	3. 7	·01694	3. 0	68 ·0	70 ·0
0. 43	32. 10	1. 4	·1184	4. 30	·01738	9. 0	70 ·0	71 ·0
1. 48	36. 20		***	7. 26	·01719	21. 0	62 ·2	64 ·2
2. 9	35. 30	2. 45	·1174	9. 25	·01684			
3. 26	35. 10		***	10. 45	·01764			
4. 40	34. 0	3. 45	·1179	12. 10	·01920			
5. 28	33. 50	4. 6	·1175	15. 10	{·02508			
7. 19	29. 10		***		·02420			
8. 12	28. 0	5. 59	·1198	18. 7	·02412			
9. 27	30. 20	8. 0	·1185	22. 25	·02437			
10. 13	30. 10		***	23. 59	·02350			
10. 28	30. 40	11. 40	·1199					
11. 30	29. 0	12. 23	·1216					
11. 45	30. 50	13. 25	·1198					
12. 17	25. 30	14. 14	·1210					
12. 35	25. 30		***					
12. 52	23. 10	16. 35	·1219					
13. 15	25. 30	17. 20	·1212					
13. 40	24. 20		***					
14. 13	27. 20	18. 10	·1211					
14. 29	27. 10		***					
15. 4	28. 30	20. 13	·1198					
15. 45	27. 0	20. 25	·1180					
16. 16	26. 20	22. 45	·1161					
17. 22	26. 30	23. 5	·1164					
17. 56	24. 10	23. 59	·1159					
18. 16	24. 45							
18. 39	23. 40							
18. 56	24. 0							
19. 21	23. 25							
19. 43	23. 50							
20. 12	25. 10							
20. 45	25. 35							
21. 28	28. 10							
22. 21	28. 40							
22. 52	28. 30							
23. 24	28. 30							
23. 59	30. 0							
June 29		June 29		June 29		June 29		
0. 0	21. 30. 0	0. 0	·1159	0. 0	·02350	1. 0	66 ·0	68 ·0
0. 21	30. 5	1. 24	·1160	2. 51	·01842	3. 0	67 ·7	69 ·5
0. 36	29 10	1. 41	·1167	4. 30	·01670	9. 7	69 ·6	71 ·5
1. 40	30. 25	2. 30	·1161	6. 31	·01704	21. 0	63 ·2	65 ·0
3. 9	29. 40	2. 55	·1170	9. 52	·01673			
3. 53	29. 40		***	11. 29	·01808			
5. 54	28. 30	5. 0	·1170	16. 11	{·02484			
7. 30	26. 30	5. 25	·1176		·02410			
8. 58	27. 45	5. 50	·1173	20. 43	·02430			
9. 15	26. 30	6. 25	·1178	23. 23	·02353			
9. 45	28. 0	7. 8	·1172	23. 59	·02213			
11. 9	28. 10	7. 45	·1177					
	***	8. 30	·1172					
12. 58	26. 30	9. 50:	·1182					
13. 19	24. 20		***					
13. 58	29. 30	11. 14	·1183					
14. 12	29. 20		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 29		June 29						
h m	° ′ ″	h m		h m		h m	°	°
14. 44	21. 24. 30	12. 30	·1194					
15. 1	26. 30	12. 42	·1191					
15. 13	27. 0	13. 5	·1201					
15. 31	25. 30	13. 28	·1196					
	***	13. 45	·1197					
16. 31	25. 5	14. 14	·1215					
16. 43	26. 40	15. 0	·1197					
16. 58	23. 40	15. 40	·1206					
17. 28	26. 30		***					
17. 44	23. 50	17. 51	·1207					
17. 52	25. 0		***					
18. 4	23. 40	18. 40	·1199					
18. 43	23. 0		***					
18. 53	23. 30	21. 42	·1182					
	***	21. 55	·1167					
19. 43	20. 0	22. 14	·1174					
19. 52	20. 20	22. 30	·1165					
20. 19	17. 50	22. 45	·1165					
20. 28	19. 30	22. 55	·1156					
20. 40	19. 40	23. 15	·1155					
20. 45	18. 30	23. 26	·1164					
20. 54	18. 20	23. 59	·1158					
21. 0	14. 50							
21. 12	17. 50							
21. 43	21. 50							
21. 51	27. 50							
22. 12	21. 30							
22. 22	26. 40							
22. 30	26. 0							
	***							
23. 56	35. 0							
June 30		June 30		June 30		June 30		
0. 0	21. 34. 30	0. 0	·1159	0. 0	·02213	1. 11	68 ·5	70 ·5
0. 22	35. 15	0. 15	·1168	2. 16	·01684	3. 0	70 ·6	72 ·0
0. 40	37. 10	0. 34	·1171	6. 11	·01730	9. 0	71 ·0	73 ·0
0. 56	34. 55	0. 55	·1152	9. 5	·01705	21. 0	62 ·0	64 ·2
1. 12	34. 10	1. 0	·1142	10. 7	·01738			
1. 45	36. 30	1. 20	·1157	12. 29	·01984			
2. 1	36. 0	1. 46	·1168	15. 14	{·02510			
2. 15	34. 30	2. 10	·1155		·02453			
2. 44	34. 50	2. 30	·1166	17. 29	·02453			
3. 52	31. 30	2. 45	·1166	19. 16	·02427			
4. 3	31. 30		***	20. 4	·02440			
5. 24	29. 5	3. 44	·1147	22. 30	·02366			
5. 59	28. 30	4. 0	·1155	23. 59	·02377			
7. 1	27. 50	4. 55	·1156					
7. 22	28. 5	5. 27	·1153					
8. 15	25. 50	5. 47	·1160					
8. 42	25. 30	6. 28	·1160					
9. 10	21. 20	6. 59	·1154					
9. 25	22. 20	8. 10	·1170					
9. 54	26. 35		***					
10. 10	26. 30	9. 0	·1163					
	***	9. 14	·1172					
11. 13	28. 30	9. 25	·1170					
11. 42	31. 0	9. 38	·1176					
11. 59	31. 0	10. 35	·1171					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 30		June 30						
h m	° ′ ″	h m		h m		h m	°	°
12. 40	21. 27. 5	11. 4	·1178					
12. 51	27. 10	11. 20	·1174					
13. 4	26. 0	11. 43	·1176					
13. 39	24. 50	12. 1	·1170					
13. 59	24. 30	12. 43	·1179					
14. 21	25. 20	13. 44	·1171					
14. 40	24. 5	14. 45	·1174					
15. 7	28. 45		***					
15. 17	29. 10	17. 50	·1199					
16. 22	24. 20		***					
17. 28	20. 30	19. 25	·1182					
17. 59	21. 30	19. 45	·1182					
18. 10	20. 0		***					
18. 24	19. 50	21. 10	·1158					
18. 30	21. 0	21. 33	·1170					
18. 43	19. 20	22. 0	·1160					
18. 50	19. 30	22. 20	·1179					
19. 7	17. 30		***					
19. 15	19. 0	23. 50	·1182					
19. 30	18. 30		(†)					
19. 45	20. 0							
20. 11	17. 20							
20. 57	23. 15							
21. 28	24. 10							
21. 51	27. 0							
21. 55	26. 30							
21. 59	27. 30							
22. 11	26. 30							
22. 36	31. 10							
22. 44	30. 0							
22. 47	31. 10							
22. 51	30. 50							
22. 55	32. 30							
23. 6	30. 30							
23. 14	34. 30							
23. 19	34. 0							
23. 27	36. 30							
23. 32	35. 50							
23. 42	37. 30							
23. 59	34. 30							
July 1		July 1		July 1		July 1		
0. 0	21. 34. 30		(†)	0. 0	·02377	1. 0	64 ·0	66 ·0
0. 13	38. 30	0. 15	·1174	0. 45	·02407	3. 0	65 ·0	67 ·0
0. 41	30. 10	0. 26	·1180	3. 22	·02155	9. 0	64 ·8	66 ·4
0. 44	32. 30	0. 47	·1157	4. 40	·02136	21. 0	58 ·0	59 ·5
	***	1. 16	·1182	5. 50	·02147			
1. 12	33. 10	1. 30	·1172	7. 54	·02066			
1. 43	40. 0	1. 45	·1177	10. 12	·02085			
2. 12	40. 50		***	13. 13	·02370			
2. 51	39. 30	3. 20	·1177		·02338			
3. 15	36. 50		***	15. 34	·02311			
3. 54	35. 0	4. 25	·1187	20. 10	·02304			
4. 10	35. 50	4. 33	·1181	21. 2	·02376			
4. 25	34. 30	4. 59	·1180		(†)			
4. 41	34. 10	5. 14	·1191					
5. 0	27. 40	5. 28	·1184					
5. 14	28. 10	5. 51	·1201					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 1		July 1						
h m	° ′ ″	h m		h m		h m	°	°
5. 35	21. 25. 10	6. 15	·1187					
6. 25	29. 20	7. 0	·1183					
6. 56	29. 35	7. 27	·1187					
7. 11	28. 45		***					
9. 30	28. 10	9. 46	·1182					
10. 2	28. 30	10. 25	·1190					
10. 26	27. 30		***					
10. 36	27. 25	11. 6	·1182					
11. 33	23. 30	11. 16	·1184					
11. 46	24. 20	11. 32	[illegible]					
11. 56	24. 10	11. 44	·1185					
12. 3	26. 0	11. 51	·1192					
12. 33	24. 0	12. 10	·1188					
12. 41	25. 20	12. 52	·1201					
12. 46	24. 35	13. 14	·1183					
13. 14	26. 30		***					
13. 42	25. 30	14. 25	[illegible]					
13. 45	27. 35	14. 35	·1192					
13. 56	26. 30	15. 41	·1193					
14. 40	24. 40	16. 15	·1202					
14. 52	26. 30		***					
15. 42	26. 20	18. 13	·1202					
16. 22	22. 30		***					
	***	20. 15	·1172					
17. 56	22. 50	20. 55	·1176					
18. 9	25. 0	21. 45	·1162					
18. 14	21. 20		(†)					
18. 20	21. 10							
18. 26	25. 0							
18. 52	23. 35							
19. 2	25. 30							
19. 30	24. 20							
19. 51	25. 30							
20. 10	25. 20							
20. 22	25. 30							
20. 30	27. 0							
20. 39	25. 30							
21. 6	30. 20							
21. 28	30. 0							
22. 10	32. 40							
	(†)							
July 2		July 2		July 2		July 2		
0. 0	21. 34. 20		(†)	0. 0	·02283	1. 0	[illegible]	61 ·0
0. 12	34. 40	0. 30	·1046	2. 13	·02230	3. 0	62 ·0	[illegible]
0. 27	33. 20	0. 47	·1053	5. 56	·01776	9. 0	[illegible]	[illegible]
1. 20	34. 10	1. 0	·1050	7. 40	[illegible]	21. 0	60 ·0	[illegible]
1. 53	32. 20	1. 29	·1062	8. 15	·01610			
2. 21	33. 30	1. 52	·1058	8. 30	[illegible]			
3. 51	28. 40	2. 20	·1075	9. 15	·01522			
3. 57	29. 20		***	11. 56	[illegible]			
4. 12	28. 30	3. 26	·1064	17. 50	·02240			
4. 29	29. 20	4. 0	[illegible]	20. 15	·02292			
4. 45	28. 30	4. 30	·1074	23. 22	·02273			
5. 54	28. 30	4. 55	·1078		(†)			
6. 15	29. 10	5. 12	·1081					
6. 22	30. 0	5. 25	·1080					
6. 54	26. 40	5. 36	·1088					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

HORIZONTAL FORCE. July 1d. 22h. In consequence of the force appearing unusually large from June 27, the box containing the magnet was opened, and all parts connected with it examined. It seemed to move freely, but finally settled in a position differing by nearly six divisions of the scale, or indicating a less force by 0·0122. It is possible that the numbers between June 27 and July 1 may be too large by this quantity, yet the magnet within this interval moved freely, as shown by the Photographic Traces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 2		July 2						
h m	° ′ ″	h m		h m		h m	°	°
7. 1	21. 26. 40	5. 55	·1091					
7. 18	24. 0	6. 5	·1088					
7. 30	27. 45	6. 26	·1094					
7. 40	27. 35		***					
7. 51	29. 35	7. 8	·1085					
8. 15	24. 55	7. 25	·1094					
8. 23	22. 30	7. 30	·1086					
8. 38	32. 0	7. 42	·1096					
8. 52	28. 40	8. 5	·1074					
9. 10	29. 30	8. 30	·1102					
9. 30	28. 40	8. 45	·1080					
9. 45	28. 25	9. 0	·1082					
10. 13	25. 0	9. 24	·1068					
10. 40	26. 20	9. 40	·1072					
10. 56	26. 10	10. 8	·1067					
11. 30	28. 25	10. 24	·1071					
12. 44	23. 0	10. 30	·1068					
13. 14	26. 30	11. 5	·1066					
14. 15	25. 30	11. 30	·1071					
15. 28	25. 30	12. 2	·1084					
17. 12	22. 0	12. 25	·1075					
18. 28	13. 30	12. 45	·1080					
18. 36	17. 0	14. 0	·1075					
18. 41	17. 40	15. 54	·1079					
	***	20. 0	·1064					
19. 28	17. 50		***					
19. 41	16. 30	22. 38	·1068					
20. 26	18. 20	23. 10	·1060					
20. 36	20. 30	23. 59	·1068					
21. 0	20. 0							
22. 15	23. 30							
23. 6	27. 35							
23. 59	31. 40							
July 3		July 3		July 3		July 3		
0. 0	21. 31. 45	0. 0	·1068	0. 30	·02247	1. 0	62 ·0	63 ·0
0. 31	36. 0	0. 29	·1069		***	3. 0	62 ·7	64 ·0
0. 45	35. 15	0. 45	·1059	3. 27	·02106	9. 0	62 ·0	63 ·3
1. 1	37. 0	1. 0	·1076		***	22. 12	59 ·7	60 ·6
1. 27	33. 50	1. 15	·1052	5. 48	·02048			
1. 52	34. 30	3. 15	·1070	7. 15	·02053			
2. 15	37. 30		***	12. 39	·02175			
2. 53	37. 50	4. 5	·1075	14. 30	·02284			
3. 14	40. 30	4. 45	·1090	15. 40	·02300			
3. 29	34. 0	4. 58	·1108	16. 6	·02237			
3. 52	31. 30	5. 14	·1099	18. 21	·02406			
3. 59	32. 0	5. 28	·1107	19. 15	·02406			
4. 20	30. 0	6. 10	·1092	20. 18	·02366			
4. 51	32. 30	6. 37	·1104	22. 10	·02380			
4. 56	31. 35	6. 45	·1097	23. 59	·02192			
5. 10	33. 25	7. 0	·1096					
5. 21	31. 45	7. 15	·1082					
5. 32	33. 10	7. 50	·1101					
5. 49	31. 30	8. 17	·1082					
6. 13	30. 50	9. 15	·1072					
6. 24	31. 30	10. 25	·1086					
6. 36	30. 40	10. 45	·1086					
6. 43	30. 45	11. 35	·1064					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 3		July 3						
h m	° ′ ″	h m		h m		h m	°	°
7. 6	21. 26. 35	12. 2	·1072					
7. 51	20. 0	12. 25	·1084					
8. 12	22. 30	13. 55	·1082					
8. 27	21. 0	14. 30	·1074					
8. 45	22. 20	15. 0	·1077					
9. 14	24. 10	15. 40	·1091					
9. 26	26. 20	17. 10	·1093					
9. 45	26. 40	17. 45	·1083					
10. 13	26. 30		***					
10. 28	25. 0	19. 15	·1082					
11. 0	26. 30	20. 5	·1073					
11. 27	24. 30	20. 55	·1049					
11. 40	28. 30	21. 45	·1060					
11. 44	27. 50	21. 56	·1056					
11. 48	28. 50	22. 15	·1063					
12. 0	27. 30	22. 25	·1056					
12. 13	32. 0	23. 15	·1042					
12. 19	31. 40	23. 59	·1056					
12. 29	34. 0							
12. 52	28. 30							
13. 51	26. 15							
14. 13	28. 0							
15. 25	31. 0							
15. 43	31. 0							
16. 30:	23. 40							
17. 6	24. 30							
17. 40	22. 30							
17. 51	22. 45							
17. 56	22. 0							
18. 17	23. 40							
18. 32	22. 30							
18. 44	23. 20							
19. 0	19. 30							
19. 12	21. 0							
19. 27	22. 50							
19. 41	21. 0							
19. 51	21. 0							
20. 22	18. 45							
20. 40	20. 20							
20. 44	20. 10							
21. 9	26. 10							
21. 28	25. 30							
21. 40	26. 10							
21. 52	26. 10							
22. 11	28. 50							
22. 27	29. 30							
22. 41	30. 0							
22. 52	29. 45							
23. 12	31. 10							
23. 16	29. 20							
23. 59	32. 10							
July 4		July 4		July 4		July 4		
0. 0	21. 32. 15	0. 0	·1057	0. 0	·02192	8. 37	67 ·6	68 ·0
0. 14	33. 10	0. 11	·1058	1. 17	·01984	21. 0	61 ·4	62 ·3
	***	1. 17	·1054	3. 0	·01638			
1. 49	32. 15	2. 6	·1058	5. 10	·01663			
2. 13	31. 20	2. 21	·1092	6. 15	·01622			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 4		July 4		July 4				
h m	° ′ ″	h m		h m		h m	°	°
2. 29	21. 33. 30	2. 23	·1087	9. 14	·01644			
2. 42	31. 50	2. 28	·1087	10. 15	·01733			
2. 52	34. 20	2. 32	·1099	10. 30	·01710			
3. 13	34. 30	2. 52	·1075	12. 30	·01967			
3. 19	33. 30	3. 0	·1083	12. 56	·01983			
3. 44	32. 10	3. 3	·1077	14. 42	·02286			
4. 12	33. 40	3. 6	·1086	15. 13	·02365			
5. 30	31. 30	3. 24	·1064	15. 30	·02358			
5. 44	32. 10	3. 42	·1056	15. 58	{ ·02407			
5. 58	32. 0	4. 15:	·1066		·02368			
6. 18	28. 40	5. 0	·1048	19. 55	·02438			
6. 25	29. 30	5. 30	·1052	23. 15	·02387			
6. 52	28. 10	5. 47	·1072	23. 59	·02392			
7. 53	27. 25	6. 10	·1055					
8. 27	25. 30	6. 18	·1037					
9. 15	27. 30	6. 21	·1054					
9. 39	26. 10		***					
9. 42	26. 30	7. 0	·1050					
9. 52	25. 25	7. 10	·1058					
10. 22	26. 25	7. 22	·1059					
10. 30	30. 30	7. 30	·1061					
10. 50	23. 35	7. 35	·1048					
11. 11	28. 30	8. 3	·1072					
11. 26	25. 45	8. 15	·1057					
11. 52	25. 10		***					
12. 12	27. 0	9. 6	·1070					
12. 20	32. 0	9. 28	·1062					
12. 30	30. 50	9. 42	·1070					
12. 39	30. 55	9. 49	·1064					
12. 57	26. 30	10. 15	·1073					
13. 11	27. 50	10. 27	·1086					
13. 26	25. 20	10. 39	·1080					
	***	10. 52	·1086					
14. 11	23. 45	11. 1	·1075					
14. 39	29. 45	11. 15	·1074					
14. 41	26. 50	11. 30	·1065					
14. 45	27. 30	11. 55	·1076					
15. 12	35. 50	12. 15	·1082					
15. 44	26. 25	12. 30	·1077					
16. 14	25. 30	12. 41	·1086					
	***	13. 2	·1077					
16. 49	27. 30	13. 8	·1081					
17. 18	32. 40	13. 29	·1066					
	***		***					
18. 12	30. 0	14. 15	·1092					
18. 35	33. 30	14. 35	·1091					
19. 0	26. 35	14. 44	·1097					
	***	15. 14	·1078					
19. 22	26. 10	15. 40	·1088					
	***	16. 49	·1095					
19. 49	27. 30		***					
	***	17. 24	·1088					
21. 28	23. 45	17. 57	·1092					
21. 40	25. 20	18. 25	·1090					
22. 0	22. 30	18. 47	·1079					
22. 10	24. 30	19. 55:	·1100					
22. 30	24. 10		***					
22. 45	22. 0	21. 36	·1062					
23. 6	24. 30	22. 10	·1060					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 4		July 4						
h m	° ′ ″	h m		h m		h m	°	°
23. 52	21. 25. 30	22. 40	·1043					
23. 59	26. 0	22. 50	·1052					
		23. 4	·1054					
		23. 45	·1072					
		23. 59	·1064					
July 5		July 5		July 5		July 5		
0. 0	21. 26. 0	0. 0	·1064	0. 0	·02392	1. 0	62·6	65·2
1. 10	32. 0		***	2. 56	·02162	3. 0	64·0	66·0
	***	0. 45	·1065		***	9. 0	65·0	66·3
2. 50	32. 30	1. 0	·1073	5. 25	·02117	21. 0	60·7	61·8
2. 57	33. 45	1. 26	·1066	5. 51	·02037			
3. 14	28. 10	1. 45	·1076	6. 0	·02068			
3. 25	30. 0		***	6. 11	[illegible]			
3. 29	29. 25	2. 18	[illegible]	6. 23	·02016			
3. 42	29. 45	2. 30	·1071	7. 4	·01954			
3. 45	31. 30	2. 50	·1075		***			
3. 52	31. 0	3. 0	·1100	10. 11	·01876			
4. 5	34. 0	3. 14	·1088	10. 24	·01822			
4. 15	30. 5	3. 23	·1099	11. 11	·01876			
4. 20	31. 30	3. 39	·1086	11. 37	·01835			
4. 27	31. 10	4. 1	·1104	12. 40	·02010			
4. 36	34. 30	4. 15	·1126	14. 44	·02273			
4. 45	26. 30	4. 30	·1137	14. 55	·02068			
5. 6	33. 0	4. 41	·1106	16. 44	{ ·02495			
5. 14	35. 50	4. 54	·1133		·02468			
5. 27	30. 0	5. 1	·1114	21. 51	·02450			
	***	5. 15	·1116	23. 59	·02232			
5. 52	32. 15	5. 25	·1108					
6. 1	36. 35	5. 28	·1129					
6. 13	13. 50	5. 31	·1125					
6. 26	32. 50	5. 46	·1141					
6. 39	21. 30	5. 51	·1113					
6. 45	25. 40	6. 0	·1134					
7. 0	25. 0	6. 7	·1098					
7. 14	29. 10	6. 15	·1152					
7. 30	26. 10	6. 29	·1099					
7. 42	26. 45	6. 40	·1122					
7. 52	25. 30		***					
8. 12	26. 0	7. 5	·1113					
8. 28	27. 30	7. 24	·1092					
8. 40	26. 40	7. 32	·1074					
8. 45	27. 30	8. 0	·1081					
	***	8. 10	·1068					
9. 22	22. 30	8. 15	·1073					
9. 25	25. 40	8. 25	·1075					
9. 44	22. 30	8. 30	·1068					
9. 51	23. 30	8. 44	·1070					
10. 10	18. 15	8. 55	·1054					
10. 51	19. 30	9. 30	·1064					
10. 59	21. 30	9. 40	[illegible]					
	***	9. 48	·1062					
11. 19	18. 30	9. 59	[illegible]					
11. 33	12. 30	10. 24	·1071					
11. 40	12. 45	10. 40	·1043					
11. 49	8. 0	10. 58	·1045					
12. 12	20. 20	11. 1	[illegible]					
12. 22	21. 0	11. 30	·1066					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 5		July 5						
h m	° ′ ″	h m		h m		h m	°	°
12. 38	21. 27. 30	11. 45	·1045					
12. 46	23. 30	11. 55	·1063					
13. 15	20. 35	12. 9	·1066					
13. 36	24. 35	12. 13	·1062					
13. 51	24. 20	12. 25	·1067					
14. 14	27. 35	12. 34	·1088					
	***	12. 45	·1076					
14. 42	28. 20		***					
14. 53	35. 30	13. 12	·1080					
15. 24	28. 25		***					
15. 45	23. 30	13. 40	·1074					
16. 11	22. 20		***					
16. 21	22. 30	14. 35	·1081					
16. 40	21. 10	14. 44	·1094					
16. 59	21. 35	15. 9	·1071					
17. 21	20. 50		***					
	***	16. 30	·1092					
18. 30	21. 30		***					
	***	18. 0	·1084					
18. 43	20. 25	19. 25	·1054					
	***		***					
19. 27	23. 15	20. 33	·1054					
19. 40	22. 30		***					
	***	22. 15:	·1066					
20. 27	27. 30		***					
20. 31	27. 0	23. 55	·1058					
20. 45	27. 45		(†)					
21. 54	27. 40							
	***							
22. 35	29. 35							
22. 45	29. 45							
23. 28	32. 30							
23. 40	32. 0							
23. 55	32. 50							
July 6		July 6		July 6		July 6		
0. 0	21. 32. 50		(†)	0. 0	·02232	1. 0	63 ·3	65 ·0
0. 12	32. 30	0. 8	·1055	3. 2	·01830	3. 0	65 ·0	66 ·2
1. 39	35. 10		***	4. 45	·01707	9. 0	66 ·4	68 ·4
1. 54	33. 20	0. 57	·1061	5. 45	·01764	21. 0	61 ·7	61 ·9
2. 6	32. 45	1. 42	·1059	9. 43	·01685			
2. 12	34. 10	2. 2	·1049	10. 50	·01713			
	(†)	2. 10	·1058	16. 40	{ ·02480 ·02433			
3. 0	32. 56	2. 43	·1067					
5. 4	31. 10	2. 47	·1061	22. 12	·02440			
5. 15	31. 0	3. 1	·1059	23. 59	·02390			
5. 28	28. 40		***					
5. 44	24. 0	3. 53	·1076					
5. 54	28. 20	4. 5	·1070					
6. 13	26. 45	4. 43	·1084					
6. 40	30. 20	5. 1	·1076					
6. 54	30. 40	5. 25	·1079					
7. 12	30. 0	5. 52	·1108					
7. 52	30. 30	5. 59	·1100					
8. 43	27. 40	6. 10	·1096					
9. 0	30. 20	6. 25	·1100					
9. 19	30. 0	6. 44	·1076					
9. 37	30. 50	7. 15	·1070					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 6		July 6						
h m	° ′ ″	h m		h m		h m	°	°
10. 27	21. 26. 50	8. 0	·1086					
10. 40	30. 10	8. 12	·1077					
10. 52	25. 5		***					
11. 15	22. 30	9. 6	·1066					
11. 29	22. 15	9. 42	·1077					
12. 42	26. 40		***					
13. 26	24. 30	10. 26	·1070					
13. 38	26. 30	10. 44	·1093					
13. 43	25. 55		***					
13. 51	27. 30	11. 50	·1078					
14. 51	27. 30	12. 14	·1070					
15. 31	25. 10	13. 0:	·1078					
17. 7	25. 0	13. 57	·1074					
17. 22	25. 30	14. 13	·1078					
17. 51	25. 30	14. 32	·1078					
17. 57	23. 30	15. 30	·1086					
18. 6	24. 30	15. 55	·1082					
18. 15	23. 30	16. 46	·1086					
	***	17. 40	·1069					
18. 40	25. 5	18. 30	·1078					
19. 13	23. 30	19. 30	·1069					
	***		***					
20. 21	23. 5	23. 7	·1062					
23. 53	28. 40	23. 55	·1066					
23. 59	29. 20		(†)					
July 7		July 7		July 7		July 7		
0. 0	21. 29. 20		(†)	0. 0	·02390	1. 0	62 ·7	63 ·8
0. 24	28. 30	0. 15	·1060	3. 13	·02093	3. 0	64 ·0	64 ·6
1. 56	31. 10	1. 20	·1060	4. 45	·02006	9. 0	63 ·2	64 ·8
3. 27	29. 30	1. 45	·1066	7. 22	·02057	21. 0	59 ·2	60 ·4
	***	3. 18	·1075	10. 12	·02072			
5. 40	30. 5	3. 40	·1081	12. 31	·02140			
6. 13	28. 40		***	16. 30	·02368			
9. 43	28. 25	4. 37	·1074	16. 40	·02273			
10. 1	26. 50	6. 0	·1088	19. 15	{ ·02447 ·02410			
10. 40	27. 20	7. 50	·1086					
11. 16	26. 30	8. 15	·1088	21. 0:	·02400			
11. 54	28. 30	9. 45	·1086	23. 59	·02044			
12. 44	27. 20	10. 0	·1090					
14. 31	27. 50	10. 45	·1085					
16. 48	24. 55	11. 1	·1087					
16. 59	25. 30	11. 40	·1084					
17. 26	25. 30	12. 11	·1090					
18. 4	23. 30	12. 40	·1087					
19. 42	22. 5	18. 0:	·1090					
22. 4	25. 30	22. 45	·1059					
23. 59	30. 0	23. 59	·1055					
July 8		July 8		July 8		July 8		
0. 0	21. 30. 0	0. 0	·1054	0. 0	·02044	1. 0	63 ·5	64 ·8
2. 16	33. 20	2. 26	·1073	2. 39	·01530	3. 0	63 ·7	65 ·0
2. 25	32. 30	2. 50	·1071	4. 27	·01526	9. 0	62 ·0	64 ·3
3. 40	32. 30	4. 25	·1088	10. 21:	·01727	21. 0	59 ·0	60 ·0
4. 11	31. 20		***	17. 52:	·02317			
5. 29	30. 40	5. 24	·1089	23. 59	·01944			
5. 45	29. 20	5. 48	·1096					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
July 8		July 8						
h m	° ′ ″	h m s		h m		h m	°	°
6. 57	21. 28. 10	6. 15	·1090					
7. 21	28. 30	6. 45	·1097					
7. 50	27. 50	6. 55	·1092					
8. 12	28. 10		***					
9. 28	26. 40	9. 14	·1095					
9. 40	27. 10	9. 25	·1090					
9. 51	26. 0	9. 45	·1089					
11. 44	27. 10	9. 56	·1086					
11. 57	26. 50	10. 24	·1094					
12. 13	28. 0	11. 25	·1086					
12. 51	26. 45	11. 45	·1094					
12. 58	26. 55	11. 55	·1086					
14. 39	24. 20		***					
14. 42	24. 45	13. 0	·1092					
15. 45	22. 30		***					
16. 22	23. 20	17. 17	·1097					
16. 40	22. 0		***					
17. 10	23. 30	19. 40:	·1089					
17. 16	22. 0	22. 0	·1052					
17. 27	23. 35	23. 59	·1062					
17. 43	22. 40							
17. 58	24. 20							
18. 12	22. 10							
18. 29	23. 35							
	***							
18. 52	21. 30							
	***							
20. 22	21. 0							
20. 40	22. 0							
20. 52	21. 30							
21. 37	22. 30							
23. 7	27. 30							
23. 59	33. 45							
July 9		July 9		July 9		July 9		
0. 0	21. 33. 45	0. 0	·1062	0. 0	·01944	1. 0	63·0	64·8
0. 40	34. 5	0. 45	·1050	1. 37	·01544	3. 0	64·6	65·6
0. 56	36. 20	1. 0	·1059	3. 42	·01580	9. 0	63·0	63·0
1. 11	35. 30	1. 15	·1052	8. 12	·01593	21. 0	56·8	58·8
1. 24	36. 30	1. 30	·1061	10. 29	·01740			
3. 10	33. 10		***	14. 7	·02083			
3. 39	33. 30	3. 13	·1084	16. 40	·02384			
4. 1	30. 50	3. 45	·1102	21. 5	·02327 ·02133			
4. 44	30. 30	4. 15	·1082					
5. 6	29. 30		***	23. 59	·02008			
7. 4	26. 10	5. 18	·1087					
7. 56	27. 30	5. 38	·1083					
8. 39	24. 10	6. 45	·1091					
8. 45	25. 30	7. 0	·1088					
9. 24	25. 30	7. 50	·1094					
9. 57	26. 30	8. 15	·1090					
10. 29	25. 30	8. 42	·1095					
12. 21	27. 30	9. 0	·1087					
12. 40	26. 20	9. 30	·1088					
12. 45	26. 50	9. 48	·1084					
13. 6	24. 55	10. 51	·1087					
13. 22	27. 30	11. 13	·1082					
13. 52	28. 30	12. 17	·1090					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
July 9		July 9						
h m	° ′ ″	h m				h m		°
14. 12	21. 26. 30	12. 40	[illegible]					
14. 40	25. 20	12. 57	·1090					
15. 12	22. 20	13. 14	·1086					
16. 0	21. 25	13. 34	·1104					
16. 36	21. 30	13. 55	[illegible]					
17. 12	18. 0		***					
17. 28	19. 20	15. 10	[illegible]					
17. 32	18. 10		***					
17. 40	19. 15	17. 32	[illegible]					
17. 43	17. 30		***					
17. 52	19. 30	18. 37	·1085					
17. 59	16. 55	19. 0	[illegible]					
18. 15	19. 50		***					
18. 40	17. 40	20. 30	·1087					
19. 7	20. 45	22. 8	·1068					
19. 14	20. 10	22. 33	·1071					
19. 54	20. 15	22. 45	·1062					
20. 12	18. 10	23. 59	·1065					
20. 15	19. 10							
20. 24	18. 45							
22. 6	24. 30							
22. 29	27. 0							
22. 35	29. 0							
23. 59	32. 40							
July 10		July 10		July 10		July 10		
0. 0	21. 32. 40	0. 0	·1065	0. 0	·02008	1. 0	60·2	62·0
0. 56	36. 0	0. 30:	·1064	0. 42	·01920	3. 0	64·8	66·0
2. 42	36. 30	1. 0	·1076	2. 0	·01577	9. 0	65·3	66·7
3. 27	32. 30	1. 30	·1070	3. 25	·01650	21. 58	64·7	65·6
4. 14	30. 30	2. 40	·1090	7. 24	·01667			
4. 43	30. 45	2. 55	·1100	13. 12	·01636			
5. 14	28. 30	3. 40	·1079	17. 24	·01856			
5. 35	24. 40	4. 21	·1096	21. 11	[illegible]			
6. 5	25. 30	4. 45	·1098	23. 59	·0162[illegible]			
6. 23	23. 30	5. 0	·1104					
6. 50	25. 0	5. 27	·1096					
7. 45	26. 10	5. 42	·1085					
9. 56	26. 35	6. 1	·1104					
10. 30	24. 30		***					
11. 30	24. 50	7. 20	·1086					
11. 51	28. 45	7. 30	·1091					
12. 0	26. 30	7. 42	·1087					
12. 21	27. 20		***					
12. 43	25. 30	8. 11	·1084					
13. 12	24. 45	8. 25	·1089					
13. 43	22. 30	8. 47	·1083					
14. 12	23. 40	9. 13	·1088					
	***	9. 42	·1080					
15. 10	22. 30	10. 14	·1086					
15. 30	21. 35	11. 15	·1078					
16. 11	22. 40		***					
17. 0	19. 45	12. 45	·1088					
17. 10	25. 10	13. 55	·1079					
17. 12	18. 0		***					
17. 22	21. 10	17. 45	·1081					
	***		***					
18. 19	18. 30	18. 30	·1079					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
July 10	
h m	° ′ ″
18. 43	21. 21. 20
20. 40	21. 0
21. 58	26. 30
23. 59	34. 45
July 11	
0. 0	21. 34. 45
1. 40	37. 40
2. 32	35. 40
2. 45	35. 45
3. 10	33. 40
3. 58	31. 25
5. 42	28. 40
7. 14	28. 30
7. 40	28. 0
8. 30	28. 0
9. 0	23. 0
9. 58	26. 20
10. 52	27. 30
11. 53	27. 10
	(†)
21. 3	27. 10
21. 59	29. 0
23. 12	29. 35
23. 45	30. 30
23. 59	31. 10
July 12	
0. 0	21. 31. 15
1. 51	32. 20
2. 43	31. 10
3. 40	31. 20
4. 26	30. 0
5. 25	29. 20
6. 29⁚	26. 0
7. 51	27. 30
9. 42	27. 30
9. 50	28. 20
14. 43	27. 0
14. 56	27. 30
17. 50	22. 30
19. 30	23. 20
19. 43	22. 30
21. 56	28. 30
22. 12	28. 30
23. 59	31. 30
July 13	
0. 0	21. 31. 30
2. 45	34. 30
3. 19	21. 33. 45
4. 30	33. 40
8. 0	27. 30
8. 50	27. 35
9. 26	21. 40
9. 58	24. 0
10. 17	27. 30
14. 40	28. 40
15. 6	27. 35
15. 27	27. 30
16. 52	23. 45
17. 6	24. 15
17. 40	22. 35
17. 51	22. 50
19. 37	20. 30
21. 20	23. 0
23. 59	34. 10
July 14	
0. 0	21. 34. 10
1. 15	38. 10
2. 39	38. 0
3. 38	36. 10
4. 17	32. 45
5. 8	32. 20
5. 15	32. 45
5. 30	32. 0
5. 39	32. 25
6. 44	29. 20
9. 4	29. 30
9. 53	31. 10
10. 10	31. 0
10. 28	28. 30
10. 40	29. 0
10. 46	29. 0
10. 53	30. 20
11. 28	16. 20
11. 52	25. 20
12. 23	21. 30
12. 59	21. 40
13. 14	25. 0
13. 22	23. 30
13. 43	26. 30
15. 51	26. 25
16. 0	26. 50
16. 15	25. 30
17. 3	25. 50
17. 15	24. 30
17. 21	25. 40
17. 58	24. 45
18. 52	27. 20
19. 9	27. 5
19. 57	29. 40
21. 39	28. 20
21. 56	30. 20

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
July 10	
h m	
18. 44	·1071
	***
20. 50	·1053
22. 16	·1048
23. 59	·1041
July 11	
0. 0	·1041
1. 15	·1042
2. 0	·1052
2. 16	·1046
2. 50	·1050
3. 12	·1059
3. 39	·1052
4. 0	·1059
	***
5. 35	·1053
6. 7	·1060
6. 30	·1053
7. 25	·1055
7. 55	·1048
8. 25	·1054
8. 44	·1053
9. 12	·1057
9. 36	·1049
10. 0	·1053
10. 28	·1049
11. 10	·1051
11. 38	·1057
12. 44	·1060
	(†)
21. 3	·1057
23. 0	·1053
23. 59	·1062
July 12	
0. 0	·1063
0. 57	·1072
1. 15	·1069
1. 55	·1075
2. 50	·1070
4. 14	·1071
4. 39	·1066
5. 18	·1076
5. 59	·1064
6. 29	·1068
7. 5	·1066
8. 9	·1058
11. 40	·1063
12. 15	·1069
16. 50	·1080
21. 45	·1069
23. 59	·1064
July 13	
0. 0	·1064
0. 55	·1071
1. 30	·1064
2. 7	·1065
2. 55	·1070
3. 17	·1065
4. 45	·1073
5. 14	·1069
5. 45	·1076
8. 46	·1072
9. 7	·1068
9. 30	·1076
9. 54	·1071
10. 51	·1076
11. 5	·1074
12. 35	·1078
15. 0	·1081
18. 45	·1079
21. 30	·1070
22. 45	·1056
23. 15	·1054
23. 59	·1060
July 14	
0. 0	·1060
0. 55	·1062
1. 31	·1068
1. 55	·1062
2. 25	·1063
3. 15	·1076
3. 41	·1077
	***
4. 29	·1053
4. 45	·1059
	***
6. 0	·1050
6. 16	·1039
	***
8. 30	·1056
9. 5	·1054
10. 5	·1063
10. 25	·1054
10. 45	·1058
11. 2	·1070
11. 20	·1046
11. 41	·1066
12. 8	·1052
12. 15	·1053
12. 30	·1047
	***
13. 45	·1062
14. 25	·1060
	***
18. 15	·1068
18. 45	·1048
20. 30	·1036
21. 45	·1032
23. 59	1024

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
July 11	
0. 0	·01629
2. 43	·01784
4. 10	·018 3
8. 43	·01750
10. 47⁚	·01786
13. 0	·01946
	(†)
21. 0	·02430*
	(†)
July 12	
0. 0	·02170
1. 40	·01760
4. 25	·01836
6. 12	·01858
	***
9. 39	·01765
11. 51⁚	·01840
13. 52	·02086
16. 30	{·02636 ·02584
20. 15	{·02565 ·02483
22. 49	·02525
23. 59	·02520
July 13	
0. 0	·02520
1. 58	·02457
8. 21⁚	·01657
13. 26	{·02546 ·02496
19. 2	·02550
22. 5	·02506
23. 59	·02294
July 14	
0. 0	·02294
1. 22	·02044
2. 40	{·01726 ·01790
4. 30	·01836
6. 25	·01884
10. 15	·01776
10. 56	·01793
11. 15	·01782
11. 33	·01802
12. 21	·01803
14. 15	·02035
17. 52	{·02650 ·02592
21. 10	·02626
23. 59	·02166

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
July 11		
6. 55	73·7	74·4
21. 0	65·2	64·8
July 12		
1. 0	69·0	70·0
3. 0	71·8	73·0
9. 0	75·4	77·0
21. 0	67·6	69·2
July 13		
1. 0	69·0	70·4
3. 0	70·0	71·4
9. 0	70·7	71·7
21. 0	66·0	67·0
July 14		
1. 0	69·8	70·6
3. 0	73·0	73·0
9. 0	77·0	77·2
21. 0	74·0	72·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁚ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 14								
h m	° ′ ″	h m		h m		h m	°	°
23. 10	21. 31. 55							
23. 21	32. 55							
23. 45	33. 40							
23. 59	34. 25							
July 15		July 15		July 15		July 15		
0. 0	21. 34. 25	0. 0	·1024	0. 0	·02166	1. 0	79·0	78·0
0. 28	36. 20	0. 40	·1022	1. 0	·01850	3. 0	81·5	80·9
0. 59	36. 40	0. 55	·1016		***	9. 0	82·0	82·8
1. 49	34. 30	1. 41	·1020	5. 43	·01914	21. 10	73·0	73·7
2. 2	36. 40	2. 1	·1037	8. 21	·01820			
2. 15	36. 50	2. 11	·1032	10. 11:	·01865			
2. 41	38. 0	2. 40	·1038	10. 31	·02106			
3. 12	36. 40	3. 11	·1020	14. 52	{·02616			
3. 22	36. 45	3. 55	·1008		·02560			
4. 10	33. 10	4. 30	·1013	16. 30	·02585			
4. 40	34. 30	4. 45	·1007	20. 14	·02562			
4. 58	32. 20	5. 0	·1013	21. 57	·02597			
5. 10	32. 30	5. 25	·1002	23. 37	·02530			
5. 36	31. 10	7. 3	·1015		(†)			
7. 43	29. 20	7. 14	·1027					
9. 41	28. 30		***					
10. 40	29. 5	12. 15	·1042					
11. 26	27. 50		***					
12. 12	28. 10	14. 0	·1058					
12. 30	27. 0	15. 0	·1050					
12. 50	28. 50	15. 30	·1056					
13. 21	27. 40	16. 40	·1055					
13. 40	26. 30	17. 29	·1045					
13. 50	26. 50	19. 0:	·1059					
14. 12	23. 0		***					
14. 44	28. 0	21. 0	·1028					
15. 22	27. 50	21. 30	·1032					
15. 52	36. 10	22. 15	·1024					
16. 22	27. 50	23. 59	·1033					
16. 45	26. 40							
17. 22	27. 0							
18. 28	25. 0							
19. 22	26. 0							
20. 13	25. 0							
20. 47	23. 30							
21. 10	25. 20							
21. 26	25. 30							
21. 59	27. 30							
22. 40	28. 0							
23. 59	33. 30							
July 16		July 16		July 16		July 16		
0. 0	21. 33. 30	0. 0	·1033		(†)	1. 0	73·3	75·0
0. 11	34. 20	0. 15	·1037	1. 0	·02474*	3. 0	73·0	75·0
0. 26	33. 40	0. 46	·1056	1. 25	·02460	9. 0	70·0	71·0
0. 44	35. 5	1. 0	·1052	1. 58	·02452	21. 0	66·0	68·0
1. 3	33. 40	1. 16	·1065	7. 0	{·02647			
1. 28	35. 30	1. 31	·1058		·02592			
1. 45	34. 30	2. 14	·1068	14. 13	·02556			
2. 21	35. 30	2. 21	·1063	16. 25	·02570			
2. 31	34. 40	2. 47	·1074	21. 31	·02553			
2. 59	35. 30	3. 0	·1067	23. 59	·02407			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 16		July 16						
h m	° ′ ″	h m		h m		h m	°	°
3. 43	21. 33. 30	3. 23	·1068					
3. 51	34. 0	3. 36	·1083					
4. 5	32. 30	3. 55	·1071					
4. 28	32. 30		***					
4. 42	31. 35	6. 0	·1078					
6. 16	29. 15		***					
7. 30	28. 40	7. 40	·1074					
7. 45	29. 30		***					
7. 58	29. 0	9. 25	·1078					
8. 10	29. 30		***					
8. 53	29. 30	11. 0	·1077					
9. 13	28. 30	11. 25	·1084					
9. 53	29. 15	11. 36	·1077					
10. 33	28. 30	12. 12	·1071					
11. 0	26. 0	14. 45	·1084					
11. 29	24. 45	16. 0	·1084					
11. 48	26. 40	17. 15:	·1093					
12. 8	25. 30	21. 7	·1068					
12. 40	27. 10	21. 45	·1068					
12. 58	25. 30	22. 30	·1051					
13. 10	27. 30	22. 50	·1052					
14. 45	28. 20		***					
15. 26	27. 25	23. 59	·1054					
15. 59	26. 20							
16. 29	26. 15							
16. 58	26. 30							
17. 10	25. 30							
18. 53	23. 0							
19. 5	23. 45							
19. 43	23. 30							
21. 26	27. 30							
21. 54	27. 35							
22. 43	30. 5							
22. 50	29. 15							
22. 55	30. 10							
23. 16	29. 5							
23. 30	30. 30							
23. 59	32. 35							
July 17		July 17		July 17		July 17		
0. 0	21. 32. 35	0. 0	·1053	0. 0	·02407	1. 0	69·4	71·0
0. 15	33. 30		***	1. 25	·02127	3. 0	72·0	73·4
1. 56	35. 5	2. 30	·1036	2. 50	·01670	9. 0	75·0	75·8
3. 16	34. 30	3. 19	·1044	6. 30	·01772	22. 23	63·0	64·0
4. 42	32. 30	4. 15	·1034	9. 22	·01722			
5. 43	30. 0	4. 30	·1036	10. 25:	·01786			
6. 11	30. 5	4. 55	·1033	13. 52	{·02616			
7. 28	28. 35	5. 44	·1039		·02540			
11. 15	29. 10	7. 14	·1056	18. 25	·02560			
	(†)		***	21. 36	·02540			
16. 12	28. 0	9. 55	·1053	23. 59	·02596			
16. 32	27. 25		***					
16. 58	27. 20	13. 30	·1062					
	***	17. 0	·1075					
18. 45	23. 45		***					
20. 10	22. 45	20. 28	·1071					
21. 7	23. 30		***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 17		July 17						
h m	° ′ ″	h m		h m		h m	°	°
22. 7	21. 27. 25	23. 59	·1062					
23. 59	31. 30							
July 18		July 18		July 18		July 18		
0. 0	21. 31. 30	0. 0	·1062	0. 0	·02396	7. 40	74 ·5	74 ·5
0. 57	33. 15	1. 17	·1056	1. 44	·02107	21. 0	65 ·0	66 ·0
2. 17	33. 30	2. 5	·1042	3. 11	·01684			
4. 10	31. 45	2. 20	·1048	5. 52	·01736			
6. 40	28. 55	3. 10	·1052	8. 52	·01690			
9. 26	28. 20	4. 6	·1038	10. 2:	·01766			
9. 43	28. 50	4. 39	·1043	11. 53	·02032			
14. 43	28. 0	5. 0	·1040	14. 28	{ ·02594			
15. 40	28. 30		***		·02504			
16. 26	26. 15	6. 10	·1050	16. 45	·02530			
17. 13	26. 20		***	20. 2	·02510			
17. 40	24. 30	8. 50	·1050	21. 7	{ ·02532			
18. 5	24. 10	11. 31	·1058		·02433			
20. 11	25. 0	13. 21	·1068	22. 33	·02372			
20. 56	26. 20	13. 30	·1065	23. 59	·02164			
21. 43	29. 20	15. 40	·1080					
22. 12	29. 35	17. 40:	·1084					
23. 10	32. 45	19. 5	·1070					
23. 47	33. 15	19. 40	·1071					
23. 59	32. 40	21. 7	·1056					
		22. 45	·1059					
		23. 59	·1057					
July 19		July 19		July 19		July 19		
0. 0	21. 32. 40	0. 0	·1057	0. 0	·02164	1. 0	70 ·0	71 ·4
2. 54	31. 45	0. 45	·1058	1. 44	{ ·01670	3. 0	71 ·0	72 ·3
3. 15	32. 25	1. 10	·1049		·01740	9. 0	72 ·7	73 ·7
6. 50	28. 30	1. 35	·1049	7. 42	·01706	21. 0	65 ·0	64 ·7
7. 45	28. 30	2. 0	·1054	9. 32:	·01704			
8. 28	27. 10		***	11. 44	·01982			
8. 53	29. 0	3. 40	·1044	14. 15	{ ·02566			
10. 5	29. 35	5. 15	·1049		·02493			
10. 25	28. 40	6. 30	·1068	18. 11	·02477			
11. 0	30. 0	6. 45	·1065	21. 3	·02512			
12. 52	28. 40	7. 10	·1075	23. 59	·02256			
13. 45	29. 30	8. 0	·1060					
14. 2	28. 45		***					
14. 30	31. 55	9. 54	·1071					
14. 51	29. 55	10. 10	·1063					
14. 57	30. 30	10. 57	·1071					
15. 13	29. 15	11. 30	·1066					
15. 30	29. 55		***					
16. 7	26. 30	12. 45	·1070					
16. 15	25. 30	13. 0	·1076					
16. 42	27. 0	14. 10	·1072					
17. 6	25. 0	14. 40	·1081					
17. 21	26. 0	16. 27	·1084					
18. 15	24. 55	17. 50:	·1086					
18. 21	25. 40	18. 38	·1074					
	***	19. 12	·1078					
18. 52	24. 0		***					
19. 11	24. 40	20. 40	·1054					
19. 13	24. 0	23. 40	·1057					
19. 23	26. 30	23. 59	·1049					
July 19								
h m	° ′ ″	h m		h m		h m	°	°
19. 44	21. 23. 30							
19. 51	24. 30							
20. 6	24. 30							
20. 40	25. 45							
20. 56	27. 40							
22. 13	29. 30							
23. 43	34. 0							
23. 50	33. 45							
23. 59	34. 5							
July 20		July 20		July 20		July 20		
0. 0	21. 34. 5	0. 0	·1049	0. 0	·02256	1. 0	69 ·5	69 ·5
0. 31	35. 50	0. 35	·1049	1. 1	·02047	3. 0	72 ·0	71 ·8
0. 51	35. 40	1. 0	·1045	2. 31	·01607	9. 0	75 ·2	74 ·5
1. 0	36. 30	1. 45	·1055	5. 12	·01750	21. 0	66 ·2	67 ·7
1. 13	36. 0	2. 0	·1050	7. 26	·01772			
1. 40	37. 20	2. 16	·1068	11. 13:	·01700			
2. 5	37. 10	2. 39	·1043	15. 54	·02164			
2. 12	39. 30	3. 5	·1064	18. 49	{ ·02600			
2. 36	36. 40	3. 15	·1038		·02530			
2. 56	37. 30		***	23. 59	·02450			
3. 13	34. 45	4. 11	·1061					
3. 30	35. 50	5. 9	·1045					
3. 39	35. 30	5. 25	·1050					
3. 58	36. 30	5. 45	·1050					
4. 29	33. 30	6. 2	·1047					
4. 39	33. 40	6. 50	·1061					
5. 10	30. 0	7. 10	·1058					
5. 26	29. 40		***					
5. 45	30. 50	10. 15	·1060					
6. 13	30. 50	10. 45	·1064					
6. 37	30. 5	12. 30	·1067					
6. 44	30. 45	13. 10	·1063					
7. 31	28. 30	14. 15	·1070					
7. 40	28. 45	17. 15	·1071					
8. 9	28. 0	18. 45	·1076					
8. 58	29. 0	20. 0:	·1077					
9. 26	28. 30	21. 40	·1054					
10. 28	29. 10	23. 59	·1053					
10. 50	27. 45							
11. 55	28. 40							
12. 12	28. 0							
14. 6	28. 20							
14. 31	27. 10							
17. 12	26. 10							
17. 46	28. 0							
18. 18	26. 30							
19. 15	25. 0							
	***							
21. 44	27. 20							
23. 13	31. 45							
23. 27	31. 50							
23. 59	32. 35							
July 21		July 21		July 21		July 21		
0. 0	21. 32. 35	0. 0	·1054	0. 0	·02450	1. 0	66 ·0	67 ·2
1. 39	33. 0	1. 0	·1066	2. 15:	·02493	3. 0	67 ·0	68 ·4
6. 39	28. 10	2. 30	·1061	6. 58	·01847	9. 0	69 ·2	71 ·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
July 21	
h m	° ′ ″
8. 14	21. 27. 30
9. 40	27. 50
9. 52	28. 10
10. 52	28. 10
11. 45	26. 40
13. 15	28. 30
14. 53	28. 30
15. 41	27. 0
15. 52	27. 0
16. 52	25. 30
17. 13	26. 5
18. 10	24. 15
19. 18	26. 20
20. 18	24. 45
20. 34	25. 0
20. 52	24. 0
22. 13	30. 15
23. 30	33. 10
	(†)
July 22	
	(†)
1. 0	21. 34. 46*
3. 0	33. 39*
4. 12	32. 40
6. 10	29. 5
11. 26	29. 0
11. 52	28. 10
16. 6	26. 5
16. 53	24. 30
17. 21	25. 30
17. 52	24. 25
19. 15	23. 25
19. 44	22. 20
20. 10	22. 20
21. 36	24. 30
23. 18	32. 5
	(†)
July 23	
	(†)
0. 21	21. 36. 0
0. 39	37. 20
2. 16	36. 30
3. 29	33. 20
5. 46	29. 10
6. 44	28. 30
11. 52	28. 30
15. 12	27. 0
16. 43	24. 45
	***
16. 59	23. 30
17. 12	21. 23. 0
17. 21	24. 30
17. 40	22. 0
17. 43	24. 20
	***
18. 39	23. 35
18. 50	22. 30
18. 55	23. 30
19. 39	21. 30
19. 58	23. 0
20. 30	21. 0
20. 44	22. 45
22. 13	26. 30
	(†)
July 24	
	(†)
0. 33	21. 35. 30
1. 30	37. 0
2. 32	36. 50
3. 0	35. 20
3. 52	34. 50
4. 15	33. 45
4. 59	33. 30
5. 40	30. 50
5. 45	30. 55
6. 45	28. 30
6. 53	28. 40
7. 41	26. 50
7. 56	27. 30
9. 6	27. 40
9. 43	27. 25
	(†)
14. 18	27. 0
15. 10	27. 5
	***
17. 52	21. 30
18. 12	21. 40
18. 26	23. 5
18. 40	22. 0
19. 0	22. 30
19. 15	22. 30
19. 45	24. 35
21. 12	24. 35
23. 1	32. 30
23. 29	33. 10
23. 59	36. 0
July 25	
0. 0	21. 36. 0
0. 25	37. 0
1. 32	37. 0
3. 24	33. 25
3. 30	33. 50
6. 40	28. 40
7. 11	28. 30
8. 13:	26. 30
9. 0	27. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
July 21	
h m	
3. 10	·1064
3. 27	·1061
3. 40	·1065
4. 0	·1060
4. 38	·1060
7. 0	·1071
7. 25	·1071
8. 15	·1075
9. 24	·1073
9. 44	·1077
10. 15	·1075
10. 40	·1080
12. 20	·1078
14. 55	·1083
15. 15	·1086
16. 30	·1087
17. 28:	·1092
19. 0	·1082
20. 8	·1082
	***
22. 0	·1065
	***
23. 15	·1061
23. 55	·1066
23. 59	·1071
July 22	
0. 0	·1071
0. 40	·1074
1. 0	·1068
1. 40	·1071
2. 19	·1061
2. 48	·1069
3. 40	·1064
7. 50	·1081
8. 15	·1080
10. 40	·1080
16. 15	·1093
17. 20	·1093
20. 46	·1076
22. 41	·1060
22. 58	·1062
23. 56	·1064
23. 59	·1061
July 23	
0. 0	·1062
1. 30	·1049
3. 47	·1061
4. 15	·1059
5. 0	·1067
5. 40	·1060
6. 5	·1063
7. 0:	·1060
9. 24	·1071
	***
12. 45	·1078
	***
17. 30:	·1091
19. 40	·1082
20. 30	·1084
21. 28	·1080
21. 55	·1083
22. 10	·1076
23. 59	·1071
July 24	
0. 0	·1071
	***
1. 10	·1075
1. 45	·1083
2. 12	·1082
2. 44	·1089
3. 0	·1083
3. 31	·1075
3. 55	·1079
4. 5	·1074
4. 29	·1085
5. 0	·1081
5. 14	·1085
5. 39	·1073
6. 0	·1087
	***
8. 26	·1083
	***
11. 55	·1087
14. 15:	·1074
16. 15:	·1082
18. 30	·1076
18. 54	·1068
20. 30	·1068
20. 45	·1078
22. 40	·1082
23. 41	·1074
23. 59	·1076
July 25	
0. 0	·1077
1. 0	·1070
1. 43	·1072
2. 40	·1066
3. 8	·1075
3. 24	·1068
3. 31	·1075
4. 35	·1078
5. 42	·1074

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
July 21	
h m	
7. 6	·01864
9. 40:	·01755
14. 30	·02492 ·02440
16. 31	·02479
20. 10	·02470
21. 30	·02494
23. 45	·02307
	(†)
July 22	
	(†)
0. 30	·01926
1. 37	·01608
2. 56	·01632
6. 36:	·01586
13. 0	·01986
19. 10:	·02200
21. 12	·02107
	(†)
July 23	
	(†)
0. 50	·01886
1. 54	·01667
4. 6	·01742
6. 53	·01704
8. 21	·01773
13. 51	·02625 ·02547
16. 24	·02582
22. 27	·02529
23. 59	·02136
July 24	
0. 0	·02136
4. 13	·01680
9. 36	·01654
11. 39	·01673
13. 54:	·01773
17. 53	·02518 ·02430
20. 13	·02454
23. 59	·02428
July 25	
0. 0	·02428
1. 40:	·02397
6. 29	·01617
10. 50	·01595
18. 13	·02530 ·02452
21. 20	·02490
23. 59	·02317

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
July 21		
h m	°	°
21. 0	65·0	64·0
July 22		
1. 0	67·9	67·4
3. 0	69·4	70·0
9. 0	70·0	70·3
21. 0	66·5	67·3
July 23		
1. 0	70·0	71·6
3. 0	73·0	74·0
9. 0	70·0	71·0
21. 0	65·8	67·0
July 24		
1. 0	68·8	70·0
3. 0	70·0	71·2
9. 0	70·5	71·4
21. 15	63·8	65·0
July 25		
7. 35	69·6	70·2
21. 0	65·5	65·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 25		July 25						
h m	° ′ ″	h m		h m		h m	°	°
9. 30	21. 26. 50	6. 15	·1080					
9. 59	24. 30		***					
10. 30	26. 30	9. 20	·1075					
11. 26	28. 40	9. 55	·1081					
13. 30	27. 30	10. 5	·1077					
	***	14. 50	·1088					
14. 45	28. 25	15. 14	·1086					
15. 9	27. 0	16. 53	·1096					
15. 52	27. 50	18. 0	·1094					
	***		***					
17. 45	23. 40	19. 7	·1069					
17. 53	25. 50	19. 51	·1079					
18. 10	23. 30	20. 25	·1068					
18. 14	25. 15	20. 35	·1072					
18. 27	23. 10	20. 52	·1070					
19. 25	30. 30	21. 25	·1070					
19. 45	30. 0	21. 36	·1062					
20. 7	25. 0	22. 0	·1060					
20. 15	28. 30	23. 0	·1064					
20. 32	29. 25	23. 15	·1061					
20. 51	28. 25	23. 44	·1045					
20. 59	29. 30	23. 59	·1054					
21. 27	29. 45							
21. 40	28. 30							
21. 52	30. 30							
22. 56	31. 45							
23. 42	35. 30							
23. 59	38. 20							
July 26		July 26		July 26		July 26		
0. 0	21. 38. 20	0. 0	·1054	0. 0	·02317	1. 0	67·0	67·5
0. 10	39. 30	0. 25	·1051	3. 49	·01659	3. 0	68·2	68·8
0. 57	41. 20	0. 45	·1059	5. 51	·01780	9. 0	70·0	71·6
1. 10	41. 0	1. 2	·1075	9. 45	·01643	21. 0	64·5	65·6
2. 0	44. 20	1. 30	·1068	11. 11	·01703			
2. 43	41. 50	1. 45	·1073	16. 54	{ ·02577			
3. 3	43. 0	2. 40	·1046		02503			
	***	3. 15	·1070	22. 39	·02500			
3. 52	39. 40	3. 30	·1071	23. 59	·02357			
3. 57	40. 30	3. 39	·1062					
4. 12	39. 10	3. 45	·1062					
4. 20	39. 15	3. 47	·1051					
4. 30	38. 30	4. 0	·1068					
4. 56	39. 20	4. 7	·1061					
	***	4. 30	·1088					
5. 27	37. 50	4. 45	·1092					
5. 50	28. 30	5. 0	·1086					
6. 10	25. 0		***					
6. 40	29. 50	5. 24	·1089					
7. 9	29. 0	5. 43	·1040					
7. 41	30. 15	6. 25	·1077					
8. 14	30. 5	6. 53	·1053					
8. 35	31. 20	7. 30	·1071					
9. 14	28. 25	8. 5	·1063					
9. 30	29. 30	8. 15	·1070					
10. 4	26. 25	8. 31	·1072					
10. 22	28. 45	8. 37	·1069					
10. 43	25. 55		***					
July 26		July 26						
h m	° ′ ″	h m		h m		h m	°	°
10. 51	21. 26. 25	9. 29	·1081					
11. 30	16. 0		***					
12. 0	21. 40	9. 58	·1075					
12. 12	20. 30	10. 12	·1087					
12. 59	24. 0	10. 30	·1081					
13. 21	23. 20	10. 55	·1081					
13. 55	24. 0	11. 15	·1073					
14. 10	26. 10	11. 30	·1084					
15. 0	26. 30	11. 51	·1084					
15. 22	27. 40	12. 3	·1075					
15. 36	27. 0	12. 44	·1067					
15. 41	27. 35	13. 54	·1078					
	***	14. 0	·1071					
17. 0	24. 40	14. 10	·1078					
17. 15	25. 45	14. 54	·1074					
17. 34	24. 0	16. 15	·1080					
	***	18. 30	·1077					
18. 7	23. 40	19. 45:	·1075					
18. 13	24. 45	21. 30:	·1054					
18. 21	22. 30	23. 15	·1053					
18. 56	21. 45	23. 30	·1064					
19. 0	22. 30		(†)					
19. 15	22. 5							
19. 40	22. 30							
19. 45	24. 10							
19. 56	22. 35							
20. 12	23. 30							
20. 30	23. 0							
20. 39	24. 15							
20. 42	22. 0							
20. 52	22. 0							
21. 30	28. 5							
22. 7	28. 45							
23. 15	32. 40							
23. 45	34. 45							
23. 59	34. 30							
July 27		July 27		July 27		July 27		
0. 0	21. 34. 30	0. 0	·1056	0. 0	·02357	1. 0	67·2	67·8
0. 42	35. 50		***	1. 37	·02124	3. 0	69·2	70·5
2. 12	34. 45	6. 9	·1080	3. 45	{ ·01665	9. 0	69·3	71·3
3. 12	32. 20	7. 41	·1088		·01700	21. 0	64·5	66·5
5. 22	28. 20	7. 55	·1082	8. 0	·01630			
7. 12	26. 25	8. 55	·1084	9. 43	·01676			
7. 52	27. 30	9. 25	·1096	11. 36	·01818			
8. 44	27. 25	10. 6	·1079	17. 26	{ ·02336			
9. 22	24. 10	10. 24	·1085		·02453			
9. 40	25. 5	10. 42	·1079	23. 59	·02470			
9. 45	24. 45	11. 30	·1078					
10. 7	26. 55	12. 0	·1085					
10. 21	26. 30		***					
10. 39	27. 25	13. 10	·1091					
11. 0	22. 20	13. 40	·1086					
11. 12	23. 20		***					
11. 40	22. 0	14. 15	·1091					
11. 57	25. 0	14. 58	·1089					
12. 12	25. 5	15. 29	·1100					
12. 29	26. 30	16. 27	·1100					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 27		July 27						
h m	° ′ ″	h m		h m		h m	°	°
13. 20	21. 23. 30	17. 35	·1096					
13. 40	22. 0	18. 7	·1090					
13. 52	24. 0	18. 40	·1095					
14. 10	24. 5	19. 0	·1089					
14. 27	25. 20	19. 30	·1089					
15. 0	33. 25	20. 28	·1074					
15. 40	30. 0	21. 12	·1075					
15. 54	28. 15	21. 54	·1084					
16. 10	28. 0	22. 13	·1078					
16. 43	25. 5	23. 5	·1080					
16. 52	26. 0	23. 22	·1087					
17. 26	22. 30	23. 53	·1072					
17. 36	23. 0		(†)					
18. 39	20. 20							
18. 44	21. 15							
19. 1	20. 50							
19. 22	20. 30							
20. 12	21. 45							
20. 40	25. 5							
20. 51	24. 50							
21. 29	27. 30							
21. 44	26. 25							
21. 52	27. 20							
22. 7	27. 5							
22. 26	28. 30							
23. 10	29. 30							
23. 24	32. 0							
23. 45	31. 30							
23. 59	32. 30							
July 28		July 28		July 28		July 28		
0. 0	21. 32. 30	0. 0	·1074	0. 0	·02470	1. 0	65·8	67·0
0. 30	33. 5	0. 20	·1078	1. 37	·02427	3. 0	67·3	68·6
1. 54	37. 50	0. 45	·1072	5. 50	·01740	9. 0	68·0	68·8
2. 7	37. 40	2. 13	·1078	6. 44	·01661	21. 0	60·5	60·4
2. 22	36. 10	2. 45	·1047		·01696			
2. 28	36. 40		***	9. 29	·01673			
3. 28	33. 20	3. 40	·1068	11. 57	·01962			
	***	3. 54	·1057	14. 28	·02440			
5. 30	31. 30		***		·02388			
5. 45	32. 45	4. 54	·1063	16. 21	·02344			
6. 28	28. 30	5. 0	·1060		(†)			
7. 0	29. 40	5. 15	·1067	21. 0	·02415*			
7. 44	28. 45	5. 30	·1064	21. 24	·02390			
8. 5	29. 20	5. 45	·1077	22. 42	·02393			
8. 43	28. 20	6. 0	·1069	23. 59	·02259			
9. 10	28. 30	6. 35	·1073					
9. 43	23. 30	6. 45	·1078					
10. 0	25. 20		***					
10. 14	25. 0	7. 7	·1071					
10. 33	27. 30		***					
10. 52	25. 10	8. 0	·1076					
11. 9	25. 30	8. 10	·1073					
11. 34	24. 5	8. 16	·1079					
11. 50	26. 30	8. 30	·1070					
12. 5	26. 20	9. 30	·1072					
12. 41	27. 20	9. 45	·1076					
13. 14	29. 55	10. 6	·1072					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 28		July 28						
h m	° ′ ″	h m		h m		h m	°	°
13. 52	21. 26. 45	10. 24	·1076					
14. 30	33. 30	10. 35	·1071					
14. 55	28. 50	12. 45	·1079					
15. 15	29. 30	13. 55	·1089					
15. 27	28. 50	14. 10	·1086					
15. 45	29. 0	14. 39	·1096					
16. 7	27. 15	14. 50	·1091					
16. 28	24. 0	15. 15	·1093					
16. 52	25. 0	15. 46	·1103					
17. 0	23. 45	16. 19	·1093					
17. 10	23. 40		***					
17. 13	24. 30	17. 14	·1100					
	***		***					
17. 45	22. 40	18. 35	·1096					
	***	19. 14	·1062					
18. 4	25. 20	19. 42	·1079					
18. 15	22. 20	20. 0	·1077					
18. 18	24. 0		***					
18. 32	24. 0	20. 45	·1088					
19. 36	35. 20		***					
19. 45	35. 5	22. 10	·1080					
20. 0	32. 30		***					
20. 13	32. 45	23. 16	·1065					
20. 30	29. 30		***					
22. 10	27. 0	23. 59	·1069					
23. 13	33. 30							
23. 21	33. 35							
23. 40	35. 10							
23. 59	35. 0							
July 29		July 29		July 29		July 29		
0. 0	21. 35. 0	0. 0	·1069	0. 0	·02259	1. 0	63·5	64·6
0. 38	36. 45	1. 15	·1061	2. 44	·01613	3. 0	65·8	67·0
0. 44	34. 55	1. 55	·1043	5. 48	·01672	9. 0	67·3	68·5
2. 12	37. 5	2. 16	·1051	9. 24	·01600	21. 0	61·0	61·8
2. 40	36. 0	2. 38	·1048	11. 14	·01686			
2. 44	36. 20	2. 46	·1057	13. 30	·01940			
3. 10	33. 40	3. 5	·1049	16. 0	·02332			
3. 14	33. 45	3. 30	·1052	16. 15	·02348			
3. 30	32. 30	3. 50	·1061	16. 52	·02427			
3. 43	32. 30		***		·02360			
4. 44	29. 30	4. 41	·1059	17. 45	·02407			
7. 13	28. 10		***	20. 29	·02406			
7. 28	29. 5	5. 24	·1070	22. 15	·02470			
7. 40	28. 20	5. 30	·1063	23. 59	·02300			
8. 40	28. 20	5. 52	·1079					
9. 2	30. 10	6. 40	·1073					
9. 41	25. 20	7. 3	·1063					
9. 51	25. 50	7. 25	·1070					
10. 13	25. 30	7. 30	·1066					
10. 59	28. 0	8. 0	·1069					
11. 15	26. 50	8. 16	·1063					
11. 31	26. 30	9. 0	·1066					
12. 13	24. 10	9. 30	·1063					
12. 29	29. 0	9. 50	·1068					
12. 58	29. 0	10. 35	·1064					
13. 50	26. 10	11. 15	·1071					
	***	11. 45	·1064					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 29		July 29						
h m	° ′ ″	h m		h m		h m	°	°
14. 12	21. 26. 0	12. 17	·1071					
15. 0	23. 0	12. 33	·1066					
15. 28	28. 30	13. 30	·1078					
15. 40	27. 30	13. 36	·1074					
15. 52	31. 0		***					
16. 14	22. 40	15. 15	·1079					
16. 24	23. 40		***					
16. 38	21. 30	16. 22	·1102					
16. 56	22. 0		***					
17. 14	25. 30	16. 55	·1087					
17. 44	30. 30		***					
18. 6	30. 35	17. 39	·1094					
18. 14	32. 30	18. 5	·1079					
18. 37	27. 30		***					
	***	19. 30	·1053					
18. 53	29. 45	19. 45	·1058					
19. 0	28. 10	19. 55	·1052					
	***		***					
19. 25	37. 0	20. 34	·1065					
19. 36	37. 20	20. 50	·1065					
19. 51	36. 0	21. 0	·1059					
19. 58	32. 30		***					
20. 22	29. 20	22. 0	·1062					
20. 33	31. 0	22. 10	·1071					
20. 42	30. 0		***					
	***	22. 55	·1060					
22. 7	30. 40		***					
	***	23. 59	·1057					
22. 50	33. 20							
23. 43	37. 20							
23. 59	36. 40							
July 30		July 30		July 30		July 30		
0. 0	21. 36. 40	0. 0	·1057	0. 0	·02300	1. 0	64 ·8	66 ·0
0. 41	35. 50	0. 40	·1056	0. 30	·02115	3. 0	67 ·6	68 ·7
0. 56	37. 20	0. 56	·1071	2. 13	·01670	9. 0	69 ·3	71 ·0
1. 7	36. 30	1. 25	·1065	2. 46	{ ·01713	21. 0	63 ·5	64 ·6
1. 22	37. 0	1. 45	·1049		{ ·02086			
1. 52	35. 15	2. 10	·1062	4. 13	·01854			
2. 15	36. 10	2. 25	·1082	5. 37	·01800			
2. 26	39. 30	2. 45	·1065	6. 13	·01818			
2. 44	37. 10	2. 55	·1070	9. 10	·01700			
3. 0	38. 10	3. 10	·1057	11. 29	·01707			
3. 11	37. 20	3. 36	·1055	11. 43	·01727			
3. 21	37. 30	3. 59	·1075	12. 6	·01664			
3. 40	36. 25	4. 25	·1054	16. 0	·02306			
3. 51	39. 0	4. 58	·1058	17. 12	{ ·02542			
4. 13	35. 0	5. 14	·1075		{ ·02480			
4. 35	34. 20	5. 23	·1068	21. 24	·02518			
5. 12	35. 10	5. 35	·1077	22. 28	·02555			
5. 22	33. 30	5. 45	·1074	23. 53	·02422			
5. 56	30. 30	5. 55	·1060		(†)			
6. 5	30. 35	6. 10	·1060					
6. 39	25. 0	6. 30	·1074					
6. 58	28. 20	6. 45	·1069					
7. 12	29. 0	7. 2	·1075					
7. 30	28. 40	7. 17	·1074					
7. 58	21. 0	7. 43	·1055					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 30		July 30						
h m	° ′ ″	h m		h m		h m	°	°
8. 6	21. 21. 30	7. 53	·1066					
8. 10	21. 20	8. 8	·1062					
8. 26	24. 0	8. 20	·1051					
8. 40	17. 20	8. 35	·1068					
9. 10	22. 0	8. 55	·1071					
9. 15	21. 20	9. 13	·1062					
9. 39	25. 30		***					
10. 30	27. 25	10. 32	·1067					
10. 56	26. 40	10. 55	·1076					
11. 10	25. 0	11. 15	·1073					
11. 15	25. 45	11. 25	·1063					
11. 29	24. 10	11. 40	·1080					
11. 45	36. 0	12. 0	·1062					
12. 13	28. 30	12. 27	·1060					
12. 43	21. 40	12. 55	·1068					
13. 15	23. 30		***					
13. 44	23. 20	15. 36	·1071					
14. 0	24. 30	16. 39	·1081					
14. 39	24. 30	17. 0	·1089					
15. 27	32. 45	17. 45	·1079					
16. 12	30. 0	18. 15	·1079					
16. 49	29. 30	20. 0	·1063					
17. 0	30. 30	20. 25	·1066					
17. 44	26. 0	21. 59	·1049					
	***	22. 46	·1061					
18. 40	26. 30		***					
18. 58	24. 30	23. 59	·1060					
	***							
20. 8	23. 30							
21. 28	26. 20							
21. 52	25. 55							
	***							
23. 2	29. 15							
	***							
23. 59	33. 45							
July 31		July 31		July 31		July 31		
0. 0	21. 33. 45	0. 0	·1060		(†)	1. 0	66 ·5	67 ·8
	***		***	1. 0	·02313*	3. 0	68 ·8	70 ·8
1. 52	35. 0	3. 51	·1068	1. 22	·02207	9. 0	73 ·2	73 ·8
4. 44	31. 30	4. 10	·1078	3. 0	{ ·01700	22. 0	66 ·5	66 ·5
5. 0	30. 5	4. 38	·1066		{ ·01746			
5. 40	29. 35	4. 55	·1071	6. 42	·01776			
	(†)	5. 45	·1071	10. 40:	·01710			
9. 0	27. 12*		(†)	13. 15	·01977			
22. 0	25. 10*	9. 0	·1078*	16. 36	{ ·02597			
		22. 0	·1062*		{ ·02527			
				17. 42	·02560			
				20. 25	·02566			
				21. 53	·02606			
				23. 26	·02526			
				23. 59	·02430			
Aug. 1		Aug. 1		Aug. 1		Aug. 1		
0. 0	21. 34. 5	0. 0	·1056	0. 0	·02430	8. 0	72 ·5	73 ·5
0. 25	36. 10	0. 20	·1054	1. 10	·02256	21. 0	62 ·5	64 ·3
	***	0. 30	·1060	3. 5	{ ·01740			
1. 39	36. 0	0. 45	·1064		{ ·01782			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declina-tion	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 1		Aug. 1		Aug. 1				
h m	° ′ ″	h m		h m		h m	°	
2. 30	21. 34. 20	2. 45	·1074	4. 30	·01763			
2. 45	35. 15	3. 30	·1072		***			
2. 51	34. 30	4. 7	·1061	7. 52:	·01760			
3. 0	34. 35	4. 36	·1081	13. 51	·02613 ·02530			
3. 45	32. 40	4. 50	·1073					
4. 17	29. 10	5. 0	·1073	17. 40	·02569			
	***	5. 25	·1083	20. 30	·02540			
4. 50	28. 20	6. 2	·1081	22. 0	·02560			
4. 56	29. 5	6. 15	·1076	23. 59	·02435			
5. 13	28. 30	6. 29	·1078					
5. 26	29. 30	6. 44	·1075					
6. 36	29. 40	7. 0	·1096					
6. 40	30. 40	7. 20	·1082					
6. 57	22. 5	7. 55	·1063					
7. 28	28. 20	9. 41	·1074					
8. 0	28. 35	9. 53	·1078					
8. 13	27. 30	10. 12	·1072					
8. 59	27. 15	10. 30	·1072					
9. 20	28. 30	11. 12	·1085					
9. 43	27. 30	11. 32	·1078					
9. 58	24. 30	13. 2	·1078					
10. 28	27. 30	14. 15	·1084					
10. 50	24. 20	14. 53	·1079					
11. 22	27. 30	15. 45	·1086					
11. 43	26. 20	16. 40	·1082					
12. 2	26. 35	17. 45	·1086					
12. 30	24. 30	18. 10	·1078					
13. 0	26. 40	19. 9	·1081					
13. 45	25. 20	20. 10	·1076					
13. 52	26. 20	20. 50	·1066					
14. 51	24. 30	21. 45	·1060					
15. 30	27. 45	23. 0	·1062					
16. 59	25. 30		(†)					
17. 45	27. 0							
18. 10	24. 25							
18. 15	25. 30							
18. 45	23. 50							
19. 14	24. 40							
	***							
19. 55	23. 30							
20. 1	25. 0							
20. 16	23. 30							
20. 45	23. 30							
22. 15	27. 5							
23. 22	31. 50							
23. 52	31. 30							
23. 59	33. 25							
Aug. 2		Aug. 2		Aug. 2		Aug. 2		
0. 0	21. 33. 25		(†)	0. 0	·02435	1. 0	67·3	67·5
0. 20	33. 20	1. 40	·1068	3. 3	·01690 ·01742	3. 0	71·0	69·0
0. 52	35. 30	2. 4	·1071			9. 0	71·4	72·8
1. 22	35. 15	2. 25	·1060	7. 35	·01695	21. 4	66·0	66·5
2. 0	35. 50	2. 55	·1074	9. 15:	·01683			
2. 13	33. 40	4. 8	·1071	14. 45	·02609 ·02503			
2. 29	34. 20	4. 20	·1076					
2. 51	32. 30	4. 44	·1074	21. 45:	·02595			
3. 13	31. 50	5. 0	·1077	23. 59	·02337			

Greenwich Mean Solar Time.	Western Declina-tion.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 2		Aug. 2						
h m	° ′ ″	h m		h m		h m	°	
4. 31	21. 33. 0	5. 16	·1074					
6. 10	30. 30	5. 40	·1081					
7. 17	30. 20	7. 0	·1082					
7. 45	25. 30	7. 35	·1075					
8. 12	30. 0	7. 45	·1086					
8. 30	30. 20		***					
8. 49	28. 50	9. 0	·1074					
9. 22	28. 50	14. 11	·1089					
9. 40	30. 15		***					
11. 12	30. 0	17. 55	·1094					
12. 3	28. 40	18. 30	·1084					
12. 45	27. 50	19. 30	·1083					
13. 13	28. 0	20. 30:	·1068					
13. 28	28. 45		***					
13. 44	27. 40	23. 59	·1058					
14. 26	28. 0							
15. 41	25. 30							
16. 5	26. 0							
16. 22	24. 30							
18. 54	24. 10							
19. 6	22. 0							
19. 54	23. 40							
20. 8	23. 20							
21. 25	26. 30							
22. 22	26. 20							
23. 57	30. 30							
Aug. 3		Aug. 3		Aug. 3		Aug. 3		
0. 2	21. 31. 15	0. 0	·1058	0. 0	·02337	1. 0	70·5	70·5
0. 30	33. 5	0. 22	·1065	2. 25	·01680 ·01740	3. 0	72·7	72·6
0. 55	31. 40	0. 46	·1054			9. 0	73·0	74·0
1. 31	33. 0	1. 30	·1054	3. 0	·01738 ·01940	21. 0	66·0	67·4
2. 33	31. 30	2. 0	·1049					
3. 6	31. 40		***	4. 15:	·01795			
5. 10	28. 20	3. 10	·1062	6. 20	·01790			
6. 2	26. 50	4. 0	·1062		***			
6. 29	27. 20	5. 30	·1070	10. 0:	·01730			
6. 59	26. 30	6. 0	·1068	16. 30	·02649 ·02560			
8. 40	28. 40	6. 28	·1074					
10. 30	28. 25	6. 54	·1070	23. 0	·02596			
11. 0	27. 10	7. 16	·1077	23. 59	·02510			
12. 10	28. 15	8. 15	·1071					
12. 51	25. 30	10. 33	·1068					
13. 15	28. 30	11. 45	·1072					
14. 21	23. 30	12. 15:	·1081					
14. 55	23. 30	13. 0	·1074					
15. 18	25. 30	13. 47	·1083					
15. 45	23. 30	14. 36	·1072					
16. 30	25. 30	15. 55	·1078					
16. 50	23. 10	17. 45:	·1089					
	***	19. 21	·1090					
18. 10	23. 30	19. 40	·1084					
18. 40	22. 30	20. 15	·1087					
18. 53	20. 35	20. 45	·1080					
19. 6	21. 30	22. 15	·1080					
19. 22	21. 40	22. 45	·1068					
	***	23. 59	·1060					
20. 13	25. 0							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 3								
h m	° ′ ″	h m		h m		h m	°	°
20. 26	21. 27. 0							
20. 51	26. 10							
21. 55	28. 45							
22. 39	32. 40							
23. 13	33. 20							
23. 26	34. 55							
23. 59	36. 0							
Aug. 4		Aug. 4		Aug. 4		Aug. 4		
0. 0	21. 36. 0	0. 0	·1060	0. 0	·02508	1. 0	69·6	70·3
2. 39	35. 50		***	2. 45	{·01960	3. 0	71·0	72·4
3. 42	33. 20	5. 36	·1066		·02125}	9. 0	73·0	74·0
6. 28	28. 30	6. 30	·1073	4. 30	·01826	21. 0	69·2	70·3
7. 25	26. 20	7. 7	·1068	9. 30:	·01769			
7. 51	27. 40	7. 40	·1072	14. 0	·02285			
9. 28	28. 50	8. 0	·1069	18. 0	{·02680			
10. 13	26. 30		***		·02585}			
10. 43	26. 30	10. 38	·1080	20. 20	·02616			
10. 55	27. 55	11. 0	·1088	23. 0	·02500			
11. 15	26. 30	11. 30	·1079	23. 59	·02360			
11. 52	28. 0	12. 15	·1083					
12. 43	26. 50	14. 14	·1084					
13. 33	27. 40	14. 40	·1081					
13. 51	27. 0	16. 45	·1084					
14. 12	27. 30	17. 30	·1077					
14. 45	27. 10	19. 0:	·1082					
15. 29:	27. 20	22. 0	·1068					
16. 40	25. 0	23. 59	·1059					
	***							
18. 11	25. 30							
	***							
19. 15	24. 0							
19. 22	26. 45							
19. 30	24. 0							
19. 52	23. 15							
20. 10	24. 20							
20. 22	23. 0							
21. 40	24. 30							
22. 48	28. 45							
23. 59	29. 35							
Aug. 5		Aug. 5		Aug. 5		Aug. 5		
0. 0	21. 29. 35	0. 0	·1059	0. 0	·02360	1. 0	71·9	72·7
2. 43	32. 30	1. 6	·1048	2. 43	·01789	3. 0	73·4	74·6
4. 14	29. 20	3. 45	·1052	3. 0	{·01805	9. 0	74·4	75·5
5. 39	28. 25	4. 8	·1040		·02170}	21. 0	65·0	66·4
6. 51	26. 40	4. 30	·1046	7. 15:	·01880			
10. 51	27. 0	4. 51	·1047	12. 30	·02550			
11. 10	26. 0	5. 5	·1054	23. 53	·02549			
11. 53	26. 0	5. 47	·1056		(†)			
12. 22	23. 40	6. 0	·1060					
13. 15	28. 20	6. 15	·1054					
13. 42	26. 0		***					
14. 13	26. 15	8. 10	·1058					
14. 55	25. 0	8. 39	·1064					
15. 30	26. 45		***					
17. 25	25. 20	9. 30	·1060					
17. 34	26. 30	10. 0	·1065					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 5		Aug. 5						
h m	° ′ ″	h m		h m		h m	°	°
18. 28	21. 25. 20	11. 15	·1075					
19. 0	26. 30	11. 30	·1063					
19. 42	24. 30	12. 0	·1076					
19. 55	27. 20	12. 25	·1070					
20. 19	28. 0	13. 0	·1070					
21. 2	25. 30	13. 30	·1076					
22. 7	28. 0	14. 50	·1080					
22. 58	34. 0	17. 35	·1094					
23. 28	33. 0	18. 15	·1092					
23. 59	33. 30	18. 45	·1094					
		21. 10	·1085					
		21. 45	·1086					
		22. 0	·1080					
		22. 30	·1065					
		22. 55	·1074					
		23. 20	·1066					
		23. 59	·1062					
Aug. 6		Aug. 6		Aug. 6		Aug. 6		
0. 0	21. 33. 30	0. 0	·1062	0. 0	·02526	1. 0	66·7	68·2
0. 40	34. 10	0. 34	·1077		***	3. 0	68·4	70·0
0. 51	35. 40	0. 46	·1088	4. 8	·01910	9. 0	70·0	72·0
1. 11	34. 30	1. 15	·1078	7. 15	·01642	21. 0	63·5	64·4
1. 35	35. 40	1. 32	·1078	10. 0:	·01638			
2. 6	34. 45	1. 58	·1075	16. 44	{·02579			
2. 20	36. 10	2. 22	·1084		·02510}			
2. 35	35. 30	2. 36	·1078	22. 30:	·02505			
2. 42	36. 10	2. 45	·1082	23. 59	·02320			
3. 15	33. 35	3. 0	·1070					
3. 27	33. 55	3. 15	·1068					
4. 11	31. 20	3. 30	·1076					
4. 40	31. 35		***					
4. 55	30. 30	4. 6	·1066					
5. 14	30. 45	4. 34	·1075					
5. 51	30. 0	4. 45	·1072					
6. 14	28. 0	4. 53	·1078					
6. 24	24. 0	5. 6	·1077					
6. 40	26. 15	5. 23	·1084					
7. 0	24. 20	5. 31	·1081					
7. 19	25. 50	6. 10	·1082					
7. 40	25. 25	6. 22	·1092					
7. 54	26. 30	6. 47	·1076					
8. 10	25. 30	7. 0	·1079					
9. 7	27. 30	7. 25	·1077					
9. 21	26. 30	7. 39	·1078					
	***	7. 55	·1070					
10. 13	28. 20	8. 16	·1070					
10. 25	27. 30	8. 44	·1076					
10. 39	27. 25	9. 17	·1071					
10. 51	28. 20	9. 44	·1071					
11. 13	26. 5		***					
11. 52	25. 30	10. 37	·1074					
12. 12	22. 5	10. 55	·1080					
12. 27	23. 20		***					
12. 40	22. 30	11. 36	·1078					
13. 21	27. 20	11. 55	·1094					
14. 0	26. 20	12. 42	·1081					
14. 28	24. 35	12. 54	·1083					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 6		Aug. 6						
h m	° ' "	h m		h m		h m	°	°
15. 45	21. 25. 30	13. 17	·1074					
16. 19	24. 20	13. 55	·1080					
17. 26	26. 30	14. 30	·1078					
	***	16. 5	·1083					
18. 27	23. 40	17. 5	·1079					
19. 9	23. 25	17. 48	·1084					
19. 51	23. 50	21. 35	·1074					
21. 0	26. 30	23. 59	·1066					
22. 7	30. 40							
22. 41	32. 5							
23. 59	31. 40							
Aug. 7		Aug. 7		Aug. 7		Aug. 7		
0. 0	21. 31. 40	0. 0	·1065	0. 0	·02320	1. 0	68·0	68·8
2. 22	33. 15	0. 42	·1065	2. 52	·01610	3. 0	69·0	70·0
2. 30	32. 30	1. 25	·1058	5. 45:	·01709	9. 0	73·0	73·5
2. 52	32. 20		***	9. 40	·01630	21. 30	65·4	66·0
3. 52	29. 40	3. 36	·1056	15. 50	{ ·02650			
5. 26	27. 0	4. 2	·1059		·02558			
6. 40	27. 20	4. 25	·1057	20. 30	·02540			
7. 39	26. 40		***	23. 45	·02500			
9. 20	28. 40	8. 20	·1062					
10. 35	27. 20		***					
13. 30	28. 20	10. 10	·1074					
14. 40	27. 20		***					
15. 12	27. 40	11. 55	·1075					
16. 28	26. 30	15. 30	·1085					
	***	17. 40	·1084					
19. 26	25. 30	18. 27	·1078					
19. 36	26. 30	18. 33	·1083					
20. 0	26. 10	18. 52	·1083					
21. 42	31. 30	19. 0	·1078					
22. 26	32. 20	19. 50	·1074					
23. 59	37. 5	20. 15	·1079					
		22. 15	·1076					
		22. 44	·1070					
		23. 40	·1074					
		23. 59	·1072					
Aug. 8		Aug. 8		Aug. 8		Aug. 8		
0. 0	21. 37. 5	0. 0	·1072	0. 0	·02460	7. 30	73·5	74·0
0. 12	37. 20	0. 36	·1068	4. 10	·01671	21. 0	63·0	64·7
1. 52	33. 30	1. 33	·1071	5. 45	·01710			
2. 30	33. 30	2. 10	·1064	9. 10:	·01680			
4. 16	28. 50	3. 8	·1064	14. 40	{ ·02625			
5. 40	26. 40	3. 55	·1058		·02535			
9. 15	28. 20	4. 38	·1068	22. 0	·02530			
9. 52	27. 20	5. 0	·1068	23. 59	·02328			
10. 9	28. 10	5. 36	·1062					
16. 16	27. 0	6. 4	·1068					
17. 0	26. 15	6. 28	·1064					
17. 52	26. 45	7. 45	·1070					
	***	8. 5	·1074					
18. 41	26. 10		***					
18. 59	27. 10	9. 35	·1074					
19. 44	26. 20		***					
21. 7	27. 20	15. 55:	·1090					
22. 52	34. 35	17. 44	·1090					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 8		Aug. 8						
h m	° ' "	h m		h m		h m	°	°
23. 59	21. 35. 20	18. 0	·1086					
		18. 10	·1088					
		18. 21	·1083					
		18. 55	·1088					
		21. 0:	·1086					
		23. 59	·1076					
Aug. 9		Aug. 9		Aug. 9		Aug. 9		
0. 0	21. 35. 20	0. 0	·1076	0. 0	·02320	1. 0	[illegible]	[illegible]
2. 26	33. 30	1. 0	·1062	2. 30	·01640	3. 0	72·[illegible]	73·4
4. 27	29. 0	1. 55	·1066	3. 5	{ ·01700	9. 0	74·8	75·4
5. 12	24. 50	2. 15	·1062		·01768	21. [illegible]	[illegible]	[illegible]
7. 26	27. 10	2. 40	·1066	5. 30:	·01770			
8. 12	26. 30	4. 7	·1060	9. 30	·01689			
8. 52	28. 20	4. 30	·1066	14. 55	{ ·02662			
11. 28	29. 0	4. 45	·1063		·02580			
11. 53	28. 0		***	20. 0	·02580			
13. 22	28. 0	6. 0	·1058	21. 39	·02609			
14. 14	27. 0	6. 55	·1068	22. 40	·02540			
14. 37	27. 40		***	23. 59	·02398			
15. 7	26. 20	9. 36	·1071					
15. 52	27. 5	11. 35	·1088					
	***	11. 47	·1082					
17. 45	25. 0	12. 0	·1090					
17. 56	22. 40	12. 13	·1087					
18. 41	21. 45	13. 29	·1094					
	***	15. 15	·1094					
19. 13	22. 30	16. 30	·1099					
19. 31	26. 30	17. 32	·1091					
19. 52	24. 0	18. 12	·1094					
20. 0	26. 30	19. 7	·1086					
20. 14	25. 15	19. 25	·1092					
21. 29	30. 30	19. 45	·1086					
21. 40	30. 25	20. 47	·1096					
22. 7	32. 35	21. 5	·1092					
23. 43	36. 40	22. 5	·1108					
23. 59	36. 25	23. 30	·1094					
		23. 59	·1081					
Aug. 10		Aug. 10		Aug. 10		Aug. 10		
0. 0	21. 36. 25	0. 0	·1081	0. 0	·02398	1. 0	70·4	72·0
0. 17	37. 20	0. 8	·1081	2. 30	{ ·01770	3. 0	73·5	74·5
0. 43	36. 30	0. 13	·1088		·01820	9. 0	76·2	77·4
1. 0	37. 20	0. 41	·1070	3. 0	{ ·01834	21. 0	68·4	69·5
1. 44	37. 40	1. 9	·1082		·02260			
2. 42	34. 55	1. 38	·1083	4. 10	·01968			
2. 47	35. 40	2. 0	·1071	9. 15:	·01788			
3. 40	35. 5	2. 37	·1066	15. 15	{ ·02670			
4. 29	28. 30	2. 57	·1083		·02605			
	***	3. 14	·1080	20. 15	{ ·02650			
5. 30	30. 0	3. 34	·1084		·02520			
5. 44	29. 0	4. 14	·1072	21. 35	·02500			
5. 56	29. 0	4. 44	·1080	23. 59	·02360			
6. 22	27. 5	4. 52	·1083					
8. 5	27. 30	5. 23	·1076					
8. 30	28. 30	5. 35	·1082					
9. 7	25. 30	6. 6	·1068					
10. 10	28. 40	6. 25	·1075					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 10		Aug. 10						
h m	° ′ ″	h m		h m		h m	°	°
10. 40	21. 27. 0	6. 50	·1074					
11. 12	26. 50	7. 24	·1078					
12. 11	30. 10	7. 30	·1083					
12. 40	28. 30	8. 12	·1085					
16. 45	26. 20	8. 30	·1078					
17. 29	24. 10	8. 50	·1086					
19. 58	21. 15	9. 2	·1083 ***					
21. 40	23. 20	10. 0	·1088					
23. 3	29. 10	10. 25	·1079 ***					
23. 59	31. 40	11. 25	·1077					
		12. 0	·1092					
		13. 0	·1083 ***					
		15. 25	·1088					
		18. 30	·1092					
		21. 0	·1077					
		22. 24	·1072					
		23. 59	·1080					
Aug. 11		Aug. 11		Aug. 11		Aug. 11		
0. 0	21. 31. 40	0. 0	·1080	0. 0	·02360	1. 0	71 ·2	72 ·6
1. 59	34. 15	1. 54	·1082	2. 50	·01803	3. 0	73 ·0	75 ·5
3. 2	32. 10	2. 20	·1083	6. 15	·01860	9. 0	76 ·5	77 ·0
4. 22	30. 45	3. 0	·1070	9. 0:	·01800	21. 0	68 ·5	70 ·5
4. 38	30. 0	3. 15	·1070	14. 40	·02710 ·02640			
5. 22	28. 30	3. 40	·1078	20. 55	·02650 ·02558			
5. 52	24. 45	4. 11	·1071	22. 45:	·02390			
6. 31	26. 50	4. 17	·1076	23. 59	·02110			
6. 56	25. 30	4. 26	·1068					
7. 35	27. 30 ***	4. 45	·1076					
8. 22	22. 45	5. 23	·1070					
9. 6	26. 40	6. 14	·1082					
13. 52	26. 55	7. 0	·1067					
16. 11	25. 30	7. 12	·1068					
17. 56	22. 0	7. 22	·1063					
18. 52	21. 25	8. 0	·1062					
19. 4	22. 30	8. 11	·1068					
19. 15	21. 40	8. 32	·1065					
20. 14	23. 15	9. 25	·1073					
20. 45	26. 20	10. 0	·1071					
22. 56	31. 40	11. 14	·1079					
23. 59	36. 10	11. 16	·1074					
		11. 30	·1077					
		16. 0	·1084					
		18. 44	·1088					
		19. 10	·1082					
		19. 45	·1083					
		20. 0	·1095					
		21. 0	·1084					
		21. 30	·1093					
		22. 45	·1086					
		23. 59	·1060					
Aug. 12		Aug. 12		Aug. 12		Aug. 12		
0. 0	21. 36. 10	0. 0	·1059	0. 0	·02110	1. 0	74 ·2	75 ·3
1. 53	37. 10	0. 45	·1060	2. 10:	·01790	3. 0	77 ·0	78 ·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 12		Aug. 12		Aug. 12		Aug. 12		
h m	° ′ ″	h m		h m		h m	°	
2. 53	21. 33. 55	0. 55	·1054	3. 25	·01850	9. 0	78 ·3	80 ·0
3. 54	33. 50	1. 9	·1060	6. 7	·01872 ***	21. 0	67 ·5	69 ·0
4. 36	31. 40	2. 0	·1063	9. 30	·01763			
5. 37	29. 30	2. 16	·1051	11. 15:	·01860			
5. 58	27. 10	2. 41	·1048	15. 4	·02650 ·02583			
6. 22	26. 55	3. 30	·1063	21. 14	·02610			
6. 31	27. 45	4. 0	·1054	22. 45:	·02640			
6. 51	26. 50	4. 30	·1057	23. 59	·02520			
7. 3	27. 20	4. 37	·1052					
7. 22	26. 0	5. 0	·1062					
7. 32	27. 35	5. 28	·1061					
8. 10	27. 55	5. 40	·1066					
8. 30	23. 0	6. 0	·1055					
8. 52	28. 0	6. 24	·1063					
9. 44	28. 30	6. 42	·1053					
10. 43	25. 30	7. 9	·1060					
11. 13	21. 40	7. 15	·1058					
11. 36	22. 40	7. 41	·1065					
11. 44	22. 35	8. 7	·1057					
12. 3	24. 55	8. 35	·1073					
12. 19	24. 25	9. 11	·1064					
12. 43	28. 0	10. 31	·1066					
13. 46	27. 0	11. 2	·1077					
14. 26	34. 45	11. 42	·1059 ***					
14. 58	29. 40	13. 30	·1071					
15. 6	29. 40	14. 19	·1060					
15. 21	27. 20	15. 10	·1070 ***					
16. 11	25. 30	21. 14	·1081					
17. 58	24. 0	22. 27	·1077					
20. 58	26. 45	23. 40	·1076					
21. 15	28. 0	23. 59	·1084					
22. 0	29. 0							
23. 41	32. 55							
23. 59	35. 0							
Aug. 13		Aug. 13		Aug. 13		Aug. 13		
0. 0	21. 35. 5	0. 0	·1084	0. 0	·02520	1. 0	71 ·2	72 ·8
0. 29	36. 5	1. 30	·1050	3. 0	·01680	3. 0	74 ·0	75 ·7
1. 10	34. 20	1. 48	·1061	5. 45	·01788	9. 17	76 ·2	75 ·5
1. 47	36. 5	2. 0	·1053	9. 0:	·01700	21. 0	65 ·5	67 ·8
2. 8	34. 30	2. 36	·1059	14. 46	·02688 ·02573			
3. 6	33. 15	3. 10	·1051	17. 15	·02627			
5. 16	27. 10	3. 25	·1055	21. 16	·02595 ·02345			
5. 29	24. 30	3. 45	·1048	23. 15:	·02438			
6. 13	27. 0	4. 0	·1049	23. 59	·02410			
6. 29	26. 30	4. 15	·1059					
8. 40	26. 30	4. 30	·1061					
9. 13	28. 20	4. 45	·1054					
9. 45	22. 30	5. 15	·1060					
10. 18	23. 20	5. 26	·1057					
10. 29	27. 35	5. 40	·1062					
10. 44	25. 50	5. 59	·1053					
11. 2	21. 50	6. 20	·1061 ***					
11. 38	27. 30	7. 15	·1070					
11. 54	26. 0	7. 26	·1068 ***					
12. 52	28. 20 ***							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
Aug. 13	
h m	° ′ ″
14. 59	21. 25. 15
15. 46	27. 30
16. 0	26. 40
16. 35	27. 40
17. 8	29. 20
17. 31	27. 10
	***
17. 46	28. 20
18. 0	26. 20
18. 45	26. 30
19. 4	27. 0
19. 30	26. 0
20. 2	28. 20
20. 58	29. 20
22. 28	34. 30
22. 40	34. 25
23. 59	37. 40
Aug. 14	
0. 0	21. 37. 40
2. 20	36. 0
4. 13	29. 30
	***
5. 40	27. 0
	***
9. 52	27. 30
10. 13	25. 50
11. 58	26. 20
	***
12. 28	27. 30
12. 55	26. 0
14. 28	25. 0
14. 55	26. 20
16. 6	23. 40
16. 55	26. 30
17. 26	22. 30
17. 45	23. 35
17. 55	22. 40
18. 13	23. 30
19. 12	22. 30
19. 41	24. 45
20. 0	24. 20
20. 40	25. 10
20. 48	24. 25
21. 15	27. 10
21. 42	27. 20
23. 59	36. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Aug. 13	
h m	
8. 54	·1071
9. 40	·1078
10. 0	·1072
10. 24	·1074
11. 8	·1081
11. 23	·1079
11. 46	·1082
12. 15	·1073
	***
13. 25	·1083
	***
15. 55	·1087
	***
16. 51	·1079
	***
17. 40	·1086
20. 30:	·1079
22. 25	·1084
23. 59	·1080
Aug. 14	
0. 0	·1080
0. 45	·1087
2. 0	·1080
2. 30	·1094
	***
5. 40	·1098
	***
7. 14	·1109
7. 25	·1116
	***
8. 24	·1112
8. 40	·1109
8. 55	·1112
9. 11	·1107
9. 53	·1108
10. 14	·1118
10. 30	·1109
11. 25	·1107
	***
12. 40	·1116
	***
13. 30	·1114
	***
15. 15	·1124
	***
16. 10	·1116
16. 45	·1123
17. 25	·1117
18. 25	·1118
19. 47	·1104
20. 14	·1106
	***
22. 45	·1093
23. 24	·1087
23. 59	·1078

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Aug. 14	
0. 0	·02410
3. 10	·01700
6. 10:	·01585
11. 30	·02270
14. 40	{·02610 ·02500
17. 55	·02539
18. 7	·02270
20. 45:	·02450
23. 59	·02347

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Aug. 14		
1. 0	68 ·7	70 ·0
3. 0	71 ·3	72 ·7
9. 0	68 ·0	69 ·4
22. 34	63 ·8	65 ·7

Greenwich Mean Solar Time.	Western Declination.
Aug. 15	
h m	° ′ ″
0. 0	21. 36. 0
1. 20	33. 15
1. 39	34. 30
1. 52	34. 20
2. 28	34. 45
2. 40	32. 30
3. 21	29. 20
5. 14	25. 0
11. 22	27. 30
11. 49	26. 40
12. 40	27. 30
14. 31	27. 15
14. 52	26. 10
15. 36	27. 0
18. 51	22. 0
19. 26	22. 10
20. 33	24. 0
21. 36	27. 40
22. 18	28. 50
23. 59	33. 5
Aug. 16	
0. 0	21. 33. 5
	***
2. 2	36. 30
2. 40	35. 30
2. 50	36. 30
3. 47	29. 30
4. 7	31. 0
4. 42	30. 45
5. 43	28. 40
6. 30	28. 30
6. 56	27. 0
7. 14	27. 40
7. 40	25. 45
8. 50	26. 30
9. 8	28. 0
9. 30	23. 50
9. 52	22. 50
10. 22	25. 0
10. 45	21. 20
11. 54	25. 20
12. 12	25. 30
12. 39	22. 15
13. 42	39. 15
14. 50	17. 10
15. 10	16. 45
15. 26	20. 20
17. 12	21. 50
18. 52	20. 25
20. 52	21. 0
21. 48	26. 0
22. 58:	29. 0
23. 59	35. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Aug. 15	
h m	
0. 0	·1078
1. 5	·1077
1. 46	·1075
2. 6	·1078
2. 30	·1070
2. 45	·1075
3. 5	·1072
3. 40	·1080
4. 0	·1076
4. 54	·1082
5. 15	·1079
6. 0	·1086
7. 8	·1083
8. 15	·1088
	***
12. 30	·1100
14. 15	·1107
15. 13	·1106
18. 0	·1114
19. 30	·1106
21. 20	·1087
22. 0	·1084
	***
23. 59	·1072
Aug. 16	
0. 0	·1072
	***
2. 30	·1081
2. 45	·1071
3. 14	·1088
3. 50	·1072
4. 12	·1084
	***
6. 10	·1084
6. 54	·1078
7. 10	·1082
7. 30	·1082
8. 30	·1085
9. 0	·1082
9. 33	·1088
9. 45	·1081
10. 2	·1088
	***
10. 27	·1078
	***
11. 14	·1084
11. 21	·1094
11. 45	·1091
12. 32	·1100
12. 55	·1096
13. 14	·1098
13. 25	·1094
13. 45	·1117
14. 0	·1108
14. 15	·1101
14. 45	·1104
	***

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Aug. 15	
h m	
0. 0	·02347
1. 45	·02068
3. 20	·01660
6. 0	·01675
9. 10:	·01630
16. 15	{·02620 ·02530
18. 0	{·02568 ·02520
21. 0:	·02507
23. 20	·02269
	(†)
Aug. 16	
	(†)
1. 0	·02008*
1. 5	·01988
3. 5	{·01688 ·02080
3. 33	·02048
5. 30:	·01790
9. 30:	·01700
13. 36	·02259
13. 52	·02240
14. 15	·02302
20. 10:	·02491
23. 59	·01810

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 15		
h m	°	°
6. 4[illegible]	71 ·0	71 ·[illegible]
21. 0	65 ·[illegible]	66 ·3
Aug. 16		
1. 0	68 ·0	68 ·5
3. 0	69 ·4	70 ·2
9. 0	70 ·0	70 ·3
21. 0	63 ·7	64 ·8

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Aug. 16						
h m	° ′ ″	h m		h m		h m	°	°
		16. 45	·1100					
		17. 45	·1100					
		18. 12	·1097					
		18. 30	·1098					
		19. 8	·1096					
		21. 54	·1065					
		23. 59	·1070					
Aug. 17		Aug. 17		Aug. 17		Aug. 17		
0. 0	21. 35. 0	0. 0	·1070	0. 0	·01810	1. 0	71·6	72·0
0. 39	34. 0	0. 30	·1059	3. 2	·01705	3. 0	71·9	73·7
0. 52	36. 20	0. 45	·1064		·01911	9. 0	74·1	74·0
1. 13	35. 30	1. 15	·1051	5. 15	·01717	21. 0	69·0	70·8
2. 6	37. 20	2. 0	·1064	10. 0:	·01680			
2. 37	34. 40	2. 25	·1062	16. 0	·02100			
2. 45	35. 0	2. 36	·1052	22. 15:	·02581			
5. 59	27. 50	3. 24	·1058	23. 59	·02520			
7. 29	27. 0	4. 15	·1055					
8. 30	28. 15	4. 42	·1059					
8. 52	26. 40	5. 32	·1058					
9. 25	28. 30	5. 44	·1066					
10. 1	26. 45		***					
10. 54	27. 40	6. 15	·1054					
11. 29	27. 20	7. 0	·1057					
11. 58	29. 10	7. 44	·1065					
13. 44	27. 0	8. 7	·1063					
13. 52	27. 30		***					
16. 39	23. 55	9. 16	·1071					
16. 58	22. 30		***					
	***	11. 20	·1074					
19. 55	23. 20	12. 30	·1083					
20. 15	25. 40		***					
20. 30	25. 10	14. 30:	·1082					
21. 51	31. 30		***					
22. 40	31. 30	18. 30	·1088					
23. 59	33. 40	19. 25	·1080					
		19. 45	·1081					
		20. 45	·1068					
		21. 45	·1062					
			***					
		23. 20	·1062					
			***					
		23. 59	·1071					
Aug. 18		Aug. 18		Aug. 18		Aug. 18		
0. 0	21. 33. 40	0. 0	·1071	0. 0	·02520	1. 0	73·4	75·0
1. 10	35. 55	0. 36	·1078	5. 22	{ ·01710	3. 0	73·8	74·2
2. 29	35. 0	1. 7	·1073		·01765	9. 0	73·5	74·2
3. 59	32. 0	2. 4	·1078	9. 15:	·01720	21. 0	68·2	70·0
4. 15	32. 0	3. 5	·1073	14. 40	·02160			
5. 26	29. 30	3. 20	·1076	17. 32	{ ·02618			
7. 51	26. 30	4. 0	·1072		·02540			
	***	4. 25	·1078	22. 45:	·02575			
9. 20	29. 0	5. 15	·1072	23. 59	·02470			
9. 43	28. 0	7. 15	·1083					
10. 30	28. 20	7. 40	·1090					
10. 45	27. 0	7. 50	·1086					
11. 0	27. 5	8. 30	·1089					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 18		Aug. 18						
h m	° ′ ″	h m		h m		h m	°	°
11. 11	21. 28. 30	9. 0	·1086					
11. 30	28. 30		***					
11. 57	26. 30	10. 39	·1084					
12. 14	27. 45	11. 7	·1090					
12. 43	24. 0	11. 21	·1084					
12. 53	25. 0	11. 39	·1086					
13. 26	25. 15	11. 53	·1081					
13. 51	28. 30	12. 15	·1091					
14. 14	28. 15	12. 45	·1091					
14. 53	26. 0	13. 17	·1084					
15. 11	26. 5	13. 46	·1086					
16. 4	24. 40	14. 16	·1097					
	***	16. 16	·1093					
17. 10	24. 30	17. 42	·1098					
17. 29	23. 15	19. 12	·1089					
17. 43	23. 40		***					
18. 12	23. 30	20. 0:	·1079					
18. 54	20. 30		***					
19. 26	20. 30	21. 0	·1088					
20. 34	26. 30	22. 7	·1078					
20. 52	26. 30	22. 53	·1076					
22. 5	31. 40	23. 59	·1082					
22. 39	34. 30							
23. 59	34. 55							
Aug. 19		Aug. 19		Aug. 19		Aug. 19		
0. 0	21. 34. 55	0. 0	·1083	0. 0	·02470	1. 0	73·5	75·0
0. 26	35. 30	1. 58	·1069	3. 28	{ ·01730	3. 0	73·5	74·5
0. 53	34. 0	2. 22	·1070		·01790	9. 0	74·4	75·0
1. 32	32. 45	2. 52	·1064	7. 36	·01730	21. 0	66·0	67·0
6. 0	28. 5	3. 15	·1068	9. 15:	·01720			
6. 45	25. 55	3. 30	·1064	15. 18	{ ·02590			
8. 11	27. 30	4. 0	·1068		·02531			
8. 40	25. 10	4. 46	·1063	20. 30	·02550			
8. 59	27. 10		***	23. 59	·02525			
11. 45	27. 0	5. 45	·1077					
11. 59	28. 50	6. 11	·1070					
12. 15	27. 15		***					
19. 42	23. 0	8. 49	·1082					
21. 22	25. 30	9. 18	·1078					
23. 9	30. 10	10. 15	·1079					
23. 59	31. 40	11. 20	·1086					
		12. 10	·1097					
		12. 44	·1093					
		15. 35:	·1098					
			***					
		21. 10:	·1080					
		23. 59	·1090					
Aug. 20		Aug. 20		Aug. 20		Aug. 20		
0. 0	21. 31. 40	0. 0	·1090	0. 0	·02525	1. 0	66·5	68·3
2. 15	33. 20	2. 0:	·1082	0. 35	{ ·02548	3. 0	65·0	66·3
3. 28	32. 30	3. 23	·1091		·02380	9. 0	65·0	67·0
	***	3. 52	·1082	3. 25	·02420	21. 0	60·0	62·0
5. 6	28. 45	4. 36	·1081	7. 0:	·02315			
	***		***	11. 45:	·02496			
6. 45	28. 10	8. 10	·1086	16. 0	·02480			
	***		***		***			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.20		Aug.20		Aug.20				
h m	° ′ ″	h m		h m		h m	°	°
9. 45	21. 28. 15	11. 55	·1099	23. 55	·02470			
10. 12	26. 40	12. 20	·1093		(†)			
11. 39	25. 0		***					
11. 45	26. 5	13. 55	·1104					
12. 15	25. 0	14. 12	·1098					
12. 30	27. 0	14. 58	·1108					
13. 22	27. 30	15. 54	·1104					
13. 45	31. 30	17. 10:	·1112					
13. 53	31. 10	18. 15	·1106					
14. 24	27. 45	19. 11	·1106					
14. 59	25. 30	19. 45	·1093					
15. 42	24. 50	20. 0	·1094					
16. 7	26. 5	20. 55	·1079					
16. 21	24. 20	21. 54	·1084					
17. 2	24. 30	22. 30	·1062					
17. 28	21. 30	23. 0	·1087					
17. 41	22. 5		(†)					
17. 56	21. 35							
18. 9	22. 0							
18. 19	18. 30							
18. 24	19. 35							
18. 32	19. 15							
18. 45	21. 35							
19. 23	20. 45							
20. 24	26. 20							
20. 31	26. 0							
21. 14	30. 30							
21. 26	30. 0							
21. 37	30. 30							
21. 47	30. 5							
22. 0	32. 15							
22. 17	32. 0							
22. 30	34. 30							
22. 40	34. 45							
22. 52	36. 45							
23. 59	37. 0							
Aug.21		Aug.21		Aug.21		Aug.21		
0. 0	21. 37. 0		(†)		(†)	1. 0	62·0	63·2
0. 10	37. 45	0. 45	·1084	0. 15	·02450	3. 0	62·2	63·6
0. 30	37. 40	0. 57	·1098		***	9. 0	63·0	65·0
0. 42	39. 5	1. 40	·1094	4. 0	·02250	22. 20	64·0	65·0
	***	2. 6	·1108	6. 10	·02183			
2. 7	36. 20	2. 21	·1107	9. 50	·01852			
2. 30	36. 20	2. 30	·1121	10. 36	·01684			
3. 22	31. 40	2. 42	·1114	10. 53	·01711			
4. 43	26. 30	2. 51	·1116	15. 30:	·01542			
5. 25	26. 30	3. 22	·1098	20. 55:	·01734			
5. 44	24. 5	3. 30	·1108	23. 59	·01479			
6. 11	23. 45	3. 40	·1103					
6. 31	21. 45	3. 53	·1106					
6. 41	21. 40	4. 5	·1103					
7. 0	21. 0	4. 44	·1113					
7. 16	22. 20	5. 0	·1106					
7. 43	22. 10	5. 15	·1108					
8. 7	23. 20	5. 45	·1134					
8. 30	22. 0	6. 0	·1120					
8. 46	23. 0	6. 10	·1125					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.21		Aug.21						
h m	° ′ ″	h m		h m		h m	°	°
9. 0	21. 23. 0	6. 42	·1117					
9. 43	27. 50		***					
9. 50	31. 0	8. 8	·1133					
10. 25	22. 0	8. 30	·1133					
10. 39	12. 35	8. 44	·1125					
10. 52	21. 50	8. 55	·1128					
11. 12	23. 0	9. 7	·1124					
11. 25	25. 0	9. 24	·1120					
14. 16	26. 15	10. 0	·1141					
14. 49	25. 45	10. 43	·1096					
15. 15	27. 0	11. 0	·1124					
15. 41	25. 35	11. 15	·1113					
16. 42	26. 45	12. 0	·1120					
17. 11	25. 0		***					
18. 39	23. 35	15. 50	·1110					
18. 50	25. 10	16. 15	·1104					
19. 0	24. 20	17. 0	·1110					
19. 29	24. 10	17. 25	·1102					
20. 25	27. 30	17. 45	·1102					
20. 30	26. 50	18. 10	·1096					
23. 53	37. 45	18. 35	·1099					
23. 59	37. 50		***					
		20. 30	·1086					
			***					
		23. 45	·1087					
		23. 59	·1086					
Aug.22		Aug.22		Aug.22		Aug.22		
0. 0	21. 37. 50	0. 0	·1085	0. 0	·01479	7. 40	69·0	70·0
0. 20	37. 20	0. 24	·1076	0. 20	·01417	21. 0	62·0	64·1
1. 12	38. 20	2. 45	·1080	2. 48	·01589			
4. 39	28. 0	4. 39	·1074	5. 45:	·01635			
4. 44	28. 10	6. 0:	·1083	9. 0:	·01595			
5. 36	25. 55	6. 40	·1079	12. 43	·01880			
6. 12	25. 30		***	17. 10	{ ·02557 ·02450			
6. 44	23. 30	7. 28	·1089					
6. 56	24. 30	7. 39	·1086	21. 6	·02506			
7. 10	24. 30	9. 11	·1088	22. 45	·02490			
8. 11	27. 50	9. 29	·1083	23. 59	·02300			
9. 0	28. 30	10. 52	·1084					
9. 40	26. 25	12. 7	·1103					
10. 11	27. 30	13. 0	·1095					
11. 40	26. 10	14. 0	·1093					
11. 45	26. 45	14. 31	·1081					
12. 10	26. 30	14. 58	·1089					
12. 27	28. 20		***					
13. 29	24. 30	16. 25	·1099					
13. 59	24. 15		***					
14. 40	32. 0	18. 39	·1089					
15. 11	30. 0	19. 0	·1094					
16. 0	24. 20		***					
	***	21. 6	·1093					
17. 19	23. 0	21. 40	·1085					
	***	21. 55	·1088					
18. 15	24. 45	22. 30	·1073					
18. 33	22. 35		***					
18. 45	25. 30	23. 59	·1084					
	***							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Aug.22	
h m	° ′ ″
20. 56	21. 26. 45
21. 55	31. 45
22. 13	31. 20
23. 12	35. 30
23. 59	35. 35
Aug.23	
0. 0	21. 35. 35
0. 28	36. 30
2. 14	33. 45
2. 26	34. 5
2. 54	32. 30
5. 55	27. 30
9. 36	28. 55
12. 53	28. 30
13. 15	30. 45
13. 42	28. 20
14. 10	31. 45
14. 45	27. 0
	***
16. 29	25. 20
17. 6	26. 10
17. 28	30. 20
17. 59	31. 45
18. 29	29. 20
18. 56	28. 55
19. 15	26. 55
19. 42	26. 5
20. 52	27. 10
21. 57	33. 0
22. 13	33. 20
22. 50	36. 0
23. 14	36. 50
23. 29	35. 10
23. 40	36. 20
23. 59	34. 45
Aug.24	
0. 0	21. 34. 45
0. 22	33. 10
0. 29	33. 40
0. 54	32. 30
1. 6	33. 20
1. 39	33. 20
2. 52	29. 10
4. 19	25. 30
6. 31	24. 40
8. 15	27. 20
10. 13	26. 30
10. 39	23. 30
11. 22	26. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
Aug.23	
0. 0	·1083
0. 25	·1085
0. 53	·1076
1. 6	·1080
1. 23	·1071
	***
2. 35	·1079
2. 57	·1075
	***
4. 20	·1077
	***
6. 14	·1087
7. 0:	·1079
7. 59	·1084
9. 28	·1087
9. 45	·1082
	***
13. 7	·1093
13. 27	·1098
13. 45	·1093
14. 29	·1096
	***
15. 28	·1096
16. 50:	·1104
17. 30	·1088
	***
19. 50:	·1097
20. 41	·1084
21. 5	·1088
21. 30	·1079
21. 56	·1080
22. 4	·1076
22. 50	·1087
23. 0	·1084
	***
23. 59	·1089
Aug.24	
0. 0	·1090
0. 32	·1093
0. 45	·1086
1. 48	·1090
2. 35	·1080
3. 15	·1081
4. 0	·1071
5. 55	·1078
6. 21	·1085
6. 45	·1084
7. 8	·1080
9. 20	·1085
10. 23	·1082

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Aug.23	
0. 0	·02300
2. 5	·01643 ·01705
3. 0	·01705 ·01975
4. 0	·01818
5. 30	·01740
9. 15:	·01650
14. 36	·02540 ·02466
21. 10	·02510
22. 40	·02520
23. 59	·02378
Aug 24	
0. 0	·02378
2. 13	·01800
3. 6	·01750 ·01857
4. 11	·01774
9. 10	·01682
14. 39:	·01976
20. 0	·02595 ·02513
23. 53	·02530
	(†)

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Aug.23		
1. 0	67·5	69·3
3. 0	70·0	71·6
9. 0	70·2	71·5
21. 0	62·0	64·4
Aug.24		
1. 0	66·2	68·0
3. 0	69·8	71·2
9. 0	72·0	73·0
21. 0	66·0	67·6

Greenwich Mean Solar Time.	Western Declination.
Aug.24	
h m	° ′ ″
12. 11	21. 27. 30
13. 52	26. 45
14. 22	27. 30
15. 43	26. 40
15. 51	28. 10
17. 20	24. 30
	***
18. 51	22. 30
19. 5	23. 30
19. 29	23. 20
20. 9	25. 40
20. 30	25. 50
22. 13	32. 30
23. 11	34. 30
23. 59	35. 10
Aug.25	
0. 0	21. 35. 10
1. 18	35. 50
1. 33	33. 45
1. 41	39. 30
1. 50	38. 20
1. 57	39. 25
2. 22	36. 50
	***
3. 52	32. 35
4. 40	33. 30
5. 51	29. 30
6. 11	23. 20
6. 21	22. 45
6. 45	27. 30
7. 59	30. 0
8. 26	29. 25
8. 52	29. 35
9. 12	27. 30
9. 26	26. 0
9. 43	27. 40
10. 11	25. 30
10. 22	26. 30
10. 40	23. 45
10. 45	25. 0
10. 56	24. 45
	***
11. 23	28. 0
11. 51	25. 0
12. 15	28. 25
12. 35	38. 30
12. 52	29. 10
13. 7	34. 30
13. 30	29. 35
13. 40	31. 20
13. 56	27. 0
14. 7	26. 55
14. 13	28. 40
14. 29	11. 50
14. 45	26. 55
15. 1	17. 15
15. 10	18. 45

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Aug.24	
h m	
10. 37	·1086
15. 15	·1085
19. 0:	·1088
21. 30:	·1072
23. 59	·1082
Aug.25	
0. 0	·1082
1. 30	·1091
1. 48	·1111
2. 0	·1105
2. 6	·1112
2. 30	·1087
3. 7	·1087
3. 24	·1100
3. 38	·1099
3. 42	·1093
4. 0	·1091
4. 30	·1097
4. 55	·1082
5. 25	·1101
	***
6. 13	·1079
	***
7. 46	·1100
8. 15	·1097
8. 40	·1108
8. 48	·1097
8. 58	·1107
9. 13	·1100
9. 30	·1082
9. 55	·1092
10. 7	·1075
10. 23	·1099
10. 40	·1097
10. 45	·1081
11. 0	·1090
11. 21	·1092
11. 30	·1106
11. 55	·1092
12. 6	·1102
12. 20	·1083
12. 45	·1120
	***
13. 25	·1073
13. 35	·1090
13. 45	·1087
14. 15	·1103

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Aug.25	
	(†)
0. 25	·02540
1. 51	·02518
	***
4. 52	·02220
8. 13:	·02030
	***
12. 33	·02443
13. 0	·02417 ·02311
	***
14. 14	·02338
14. 22	·02317
14. 35	·02380
14. 46	·02395
14. 56	·02350
	***
15. 30	·02396
15. 57	·02355
	***
22. 21	·02457
23. 59	·02430

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Aug.25		
1. 0	66·0	67·8
3. 0	67·6	68·8
9. 10	66·5	68·6
21. 0	59·0	61·[illegible]

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Greenwich Mean Solar Time.	Western Declination.
Aug. 25	
h m	° ′ ″
15. 13	21. 16. 5
15. 40	30. 20
15. 52	33. 55
16. 11	30. 50
16. 26	32. 35
16. 37	31. 0
16. 41	31. 40
16. 51	29. 0
17. 0	32. 40
17. 12	27. 10
17. 21	30. 0
17. 25	26. 0
17. 30	29. 0
17. 40	21. 30
17. 44	24. 10
17. 52	22. 30
18. 7	19. 35
18. 15	21. 45
18. 26	21. 20
18. 30	23. 0
18. 41	23. 0
18. 43	25. 30
18. 45	22. 10
18. 51	23. 40
18. 55	20. 0
19. 1	22. 45
19. 9	21. 10
19. 13	28. 30
19. 18	24. 0
19. 22	25. 55
19. 30	23. 15
19. 44	23. 20
19. 49	25. 15
20. 29	26. 30
21. 30	35. 20
22. 43	35. 45
23. 30	37. 50
23. 59	37. 0
Aug. 26	
0. 0	21. 37. 0
	***
4. 10	31. 0
4. 56	23. 5
5. 14	23. 0
5. 56	27. 20
6. 40	27. 10
6. 52	28. 30
7. 7	27. 30
7. 13	27. 40
7. 30	27. 0
8. 14	28. 30
8. 43	17. 35
9. 28	29. 50
9. 40	27. 50
10. 18	27. 0
10. 44	29. 30
10. 54	28. 25

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Aug. 25	
h m	
14. 26	·1075
14. 30	·1098
14. 40	·1096
14. 48	·1109
14. 53	·1097
14. 58	·1080
15. 8	·1093
15. 12	·1084
15. 15	·1093
15. 30	·1096
	***
16. 6	·1079
16. 30	·1096
	***
18. 14	·1089
	***
19. 27	·1060
19. 44	·1062
21. 0:	·1048
	***
23. 33	·1076
23. 59	·1071
Aug. 26	
0. 0	·1071
	***
1. 45	·1087
2. 15	·1081
3. 20	·1087
4. 8	·1084
	***
4. 40	·1071
5. 0	·1085
5. 25	·1090
5. 45	·1082
6. 0	·1088
6. 17	·1081
6. 47	·1082
7. 0	·1079
7. 58	·1084
8. 25	·1073
8. 50	·1099

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Aug. 26	
0. 0	·02430
2. 56	·02220
4. 56	·01866
6. 45	·01547 ·01596
12. 13	·01450
19. 15	·01792
21. 21	·01770
23. 59	·01794

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m		
Aug. 26		
1. 0	62·0	63·0
3. 0	64·2	64·8
9. 0	66·4	66·6
21. 0	63·2	64·5

Greenwich Mean Solar Time.	Western Declination.
Aug. 26	
h m	° ′ ″
11. 0	21. 30. 0
11. 26	27. 50
11. 40	30. 30
11. 45	33. 0
11. 56	32. 30
12. 0	33. 30
12. 30	28. 50
12. 57	26. 45
13. 56	24. 45
14. 10	25. 30
14. 20	24. 45
15. 7	26. 30
15. 41	24. 30
15. 51	25. 10
16. 13	23. 30
16. 30	24. 20
16. 40	23. 30
17. 11	26. 30
17. 44	25. 55
18. 40	23. 20
19. 30	24. 10
20. 10	23. 10
20. 57	24. 15
22. 19	27. 50
22. 40	31. 20
22. 56	29. 35
23. 53	34. 45
23. 59	34. 15
Aug. 27	
0. 0	21. 34. 15
0. 10	36. 5
0. 25	35. 35
0. 31	38. 30
	(†)
1. 0	35. 31*
2. 30	36. 35
2. 56	37. 20
3. 12	35. 30
3. 54	33. 40
4. 28	34. 0
5. 45	31. 15
6. 26	18. 30
6. 52	26. 40
6. 59	26. 30
7. 13	28. 45
7. 40	28. 20
8. 12	29. 20
8. 43	24. 45
8. 52	25. 10
9. 6	23. 0
9. 27	25. 55
9. 46:	16. 5
10. 13	21. 50
10. 28	22. 35
10. 39	21. 0
10. 55	21. 30
11. 11	23. 45

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Aug. 26	
h m	
9. 25	·1077
9. 45	·1084
10. 10	·1075
10. 38	·1084
11. 10	·1075
11. 31	·1082
11. 45	·1074
11. 58	·1081
12. 13	·1080
12. 45	·1095
	***
13. 40	·1086
	***
15. 45	·1092
	***
17. 10	·1081
18. 0	·1084
19. 12	·1080
21. 45	·1063
22. 20	·1062
22. 40	·1070
23. 0	·1054
23. 59	·1072
Aug. 27	
0. 0	·1072
0. 36	·1091
1. 1	·1066
1. 25	·1070
1. 45	·1087
2. 0	·1078
2. 15	·1082
2. 35	·1066
3. 0	·1077
3. 13	·1070
3. 30	·1082
3. 45	·1077
4. 25	·1091
4. 30	·1083
4. 55	·1081
5. 8	·1089
5. 30	·1094
5. 47	·1092
6. 7	·1082
6. 36	·1109
6. 55	·1092
7. 30	·1088
7. 45	·1093
8. 10	·1090
8. 55	·1091
9. 0	·1102
9. 24	·1092
9. 50	·1113

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Aug. 27	
0. 0	·01794
3. 0	·01887
7. 59	·01476 ·01597
11. 4	·01540
12. 10	·01586
12. 29	·01566
12. 56	·01595
19. 40	·02430
	***
21. 40	·02370
23. 59	·02407

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m		
Aug. 27		
1. 0	64·0	65·0
3. 0	64·8	65·5
9. 0	65·4	67·0
21. 0	59·7	61·4

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug·27		Aug·27						
h m	° ′ ″	h m		h m		h m	°	°
11.26	21.21.20	10.13	·1096					
11.39	22. 0	10.40	·1105					
11.52	21. 0	11. 8	·1097					
12.22	29.55	11.30	·1090					
12.40	24.10	11.56	·1088					
12.53	28.10	12.13	·1097					
13.13	26.30	12.20	·1094					
13.25	27.10	12.40	·1118					
13.42	23.20	13. 2	·1098					
13.51	25. 0	13.15	·1099					
14.11	22.30	13.25	·1090					
	***	13.40	·1084					
14.44	22.30	14. 8	·1096					
15.30	27. 0		***					
15.41	27.35	14.40	·1100					
16.10	32.30	15.27	·1086					
	***	15.57	·1090					
17.43	28. 0	16.15	·1077					
17.51	29.20	16.54	·1084					
	***		***					
18.28	26. 5	17.42	·1082					
	***	18. 0	·1090					
20.29	25.30		***					
	***	20. 5	·1075					
20.51	27.30	20.45	·1072					
	***	21.25	·1064					
22.25	28.30	21.40	·1071					
22.30	30.45	22.15	·1063					
22 45	30.50		***					
23.10	32.20	23.59	·1077					
23.41	32.30							
	(†)							
Aug·28		Aug.28		Aug·28		Aug·28		
0. 2	21.32.50	0. 0	·1077	0. 0	·02407	1. 0	62·0	62·0
0.30	33.15	0.35	·1077	1.36	·02360	3. 0	63·2	64·7
0.45	36. 5	0.46	·1085	2.18	·02277	9. 0	64·0	65·8
0.59	34.30	1. 0	·1076	5.43	{ ·01536	21.30	56·5	58·0
1.33	37.20	1.14	·1076		·01600			
2. 5	36.30	1.32	·1081	9.44	·01540			
2.13	36.45	1.51	·1072	11.52:	·01620			
2.38	34.30	2. 7	·1068	17.28	{ ·02427			
2.52	33.30	2.20	·1074		·02370			
3.30	33.45	2.40	·1072	22.45	·02417			
4.39	32.10	3.10	·1084	23.59	·02322			
4.44	33. 0	3.30	·1084					
8.10	26.30	3.57	·1090					
9.30	27.45	4.14	·1081					
10.15	23.45		***					
11. 9	26.30	4.41	·1084					
11.15	28.10	4.55	·1092					
12.22	27.55	5.15	·1093					
12.36	30.45	6. 0	·1084					
12.53	28.30	6.20	·1090					
13. 0	29. 0	6.55	·1091					
13.35	28. 5	7.25	·1081					
16.53	26.40	9.11	·1087					
17.22	25.45	9.25	·1082					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug.28		Aug·28						
h m	° ′ ″	h m		h m		h m	°	°
18.16	21.25.30	9.29	·1088					
18.39	24.30	9.47	·1084					
18.52	25.30	10.16	·1094					
19.22	24.30	11.12	·1087					
	***		***					
21.12	27.35	12.45	·1089					
23.59	34.35	13. 2	·1095					
		13.13	·1090					
		16. 0:	·1099					
		17.36	·1096					
		18. 8	·1099					
		19. 0	·1086					
		19.43	·1087					
		20.30	·1079					
		23.59	·1081					
Aug·29		Aug·29		Aug·29		Aug·29		
0. 0	21.34.35	0. 0	·1081	0. 0	·02322	8. 0	66·0	67·3
1.10	37.45	1.15	·1090	3.44	{ ·01526	21. 0	62·1	63·5
4. 0	32.45		***		·01563			
4.59	32.30	3.15	·1092	8.14	·01560			
5.22	31.30		***	10.43:	·01518			
5.58	31.50	5. 7	·1104	14.40	·01787			
7. 4	30.10	5.25	·1097	20.45:	·02316			
7.11	29.10	5.42	·1097	22.43	·02287			
8.19	30. 5	6. 4	·1109	23.59	·02156			
8.53	28.30	6.18	·1106					
10.30	24.40	6.30	·1100					
10.57	26.10	6.45	·1096					
11.22	25. 5	6.55	·1099					
11.36	25.30	7. 5	·1095					
11.58	24.55		***					
13.13	28.10	8.25	·1101					
13.52	27.30	8.45	·1095					
14.26	28.20	9. 8	·1095					
15.15	23.30	9.30	·1104					
15.57	23.10	9.52	·1098					
16.40:	24.30	10. 0	·1106					
17.40	22.15		***					
	***	10.45	·1093					
19.54	22.30	11.40	·1097					
	***		***					
21.22	27.10	13.45	·1092					
21.41	29.20	14.45	·1104					
22. 0	29.15	15.41	·1101					
22.33	32.30	16.15	·1093					
22.54	32. 0	17. 0	·1097					
23.59	33.40	17.44	·1089					
		18.20	·1090					
		21. 5	·1077					
		21.36	·1079					
		22.25	·1060					
		23.59	·1068					
Aug.30		Aug·30		Aug.30		Aug.30		
0. 0	21.33.40	0. 0	·1068	0. 0	·02156	1. 0	64·0	65·2
1.51	34.30	1.40	·1094	2. 8	·01986	3. 0	65·7	67·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 30		Aug. 30		Aug. 30		Aug. 30		
h m	° ′ ″	h m		h m		h m	°	°
2. 6	21. 33. 55	2. 30	·1084	4. 10	{ ·01620	9. 0	66·5	67·0
3. 15	33. 50	3. 20	·1084		{ ·01730	21. 0	57·0	[illegible]
3. 45	32. 30	3. 41	·1096	9. 28	·01607			
4. 53	32. 40		***	13. 21	·02056			
5. 13	30. 0	4. 30	·1093	15. 27	{ ·02497			
5. 21	30. 30	4. 46	·1079		{ ·02420			
5. 37	28. 10	5. 30	·1100	17. 58	·02456			
6. 6	29. 15	6. 5	·1090	20. 0	·02417			
6. 22	28. 0	6. 35	·1082	22. 11	·02437			
6. 43	29. 10	7. 0	·1093	23. 59	·02356			
7. 7	27. 0		***					
7. 30	28. 45	7. 39	·1082					
7. 52	27. 30	7. 55	·1083					
8. 15	27. 35	8. 15	·1093					
8. 29	29. 10	8. 29	·1112					
8. 44	28. 20	8. 56	·1094					
8. 51	25. 10	9. 9	·1108					
9. 0	28. 35	9. 28	·1076					
9. 29	20. 0	9. 34	·1086					
9. 45	27. 45	9. 55	·1088					
10. 9	20. 0	10. 14	·1071					
10. 14	21. 10	10. 25	·1066					
10. 41	24. 20	10. 40	·1068					
11. 6	20. 0	11. 15	·1085					
	***	12. 10	·1090					
11. 58	20. 50	12. 25	·1086					
12. 26	23. 35	13. 6	·1099					
12. 40	23. 0	13. 33	·1091					
13. 7	27. 30	13. 58	·1099					
13. 29	29. 0	14. 15	·1095					
13. 53	22. 0	14. 45	·1100					
14. 42	22. 30		***					
15. 45	26. 30	15. 33	·1096					
16. 0	24. 30	16. 10	·1103					
16. 42	28. 20		***					
16. 51	26. 10	17. 7	·1103					
17. 12	24. 55	17. 28	·1090					
17. 44	27. 30	17. 55	·1097					
17. 59	25. 25	18. 30	·1094					
18. 12	26. 10	19. 0	·1102					
18. 28	31. 0		***					
18. 40	31. 10	20. 23	·1088					
19. 10	27. 0	20. 53	·1092					
19. 40	26. 10	22. 15	·1082					
19. 52	24. 40	22. 32	·1089					
20. 11	26. 15	22. 50	·1077					
20. 26	24. 20	23. 3	·1082					
20. 40	28. 10	23. 59	·1074					
21. 50	28. 10							
22. 30	31. 10							
22. 55	33. 30							
23. 59	35. 30							
Aug. 31		Aug. 31		Aug. 31		Aug. 31		
0. 0	21. 35. 30	0. 0	·1074	0. 0	·02356	1. 0	62·0	63·0
0. 28	37. 30	0. 10	·1085	3. 0	·01818	3. 0	63·5	65·0
	***	0. 18	·1066	4. 13	{ ·01522	9. 0	65·0	67·0
1. 30	35. 10	0. 40	·1082		{ ·01596	21. 5	61·5	62·5
					***			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 31		Aug. 31		Aug. 31				
h m	° ′ ″	h m		h m		h m	°	°
1. 49	21. 36. 45	0. 55	·1094	7. 43	·01572			
2. 0	35. 30	1. 30	·1087	8. 0	·01530			
2. 31	35. 0	1. 55	·1092	8. 45	·01510			
2. 47	37. 20	2. 5	·1088	10. 54	·01562			
	***	2. 40	·1088	14. 38	·01930			
4. 55	30. 40	2. 58	·1098	14. 46	·01927			
	***		***	19. 6	{ ·0249[illegible]			
5. 52	30. 45	4. 7	·1081		{ ·023[illegible]			
6. 29	29. 30	4. 20	·1088	22. 13	·02424			
6. 51	25. 30		***	23. 59	·02276			
	***	5. 30	·1094					
7. 28	26. 30	5. 38	·1090					
7. 31	25. 15	5. 55	·1094					
7. 44	28. 30	6. 9	·1088					
8. 0	21. 25	6. 30	·1094					
8. 26	25. 0	6. 40	·1089					
8. 45	24. 0	7. 0	·1100					
9. 15	27. 45	7. 25	·1106					
9. 38	27. 20	7. 36	·1115					
9. 51	28. 55	7. 47	·1101					
10. 11	25. 30	8. 10	·1114					
10. 33	29. 5	8. 40	·1091					
10. 45	30. 55	9. 25	·1086					
11. 11	23. 30	9. 53	·1102					
11. 42	20. 30	10. 8	·1096					
12. 22	24. 0	10. 14	·1098					
12. 29	23. 35	10. 25	·1092					
	***	10. 39	·1096					
12. 58	27. 25	10. 53	·1094					
13. 21	25. 30	11. 10	·1105					
	***		***					
14. 0	28. 20	12. 39	·1089					
14. 24	34. 30	13. 5	·1098					
14. 44	35. 30		***					
15. 29	29. 30	13. 50	·1097					
16. 0	26. 20	14. 7	·1087					
16. 11	26. 45		***					
16. 29	25. 30	14. 37	·1090					
17. 52	25. 30	15. 0	·1102					
	***	16. 10	·1107					
18. 10	23. 30	16. 45	·1096					
	***	18. 15	·1095					
20. 0	22. 50	20. 15	·1078					
20. 14	25. 30	22. 15	·1076					
20. 44	25. 35		***					
23. 3	36. 45	23. 59	·1077					
23. 12	39. 0							
23. 59	38. 30							
Sept. 1		Sept. 1		Sept. 1		Sept. 1		
0. 0	21. 38. 30	0. 0	·1077	0. 0	·02276	1. 0	65·2	66·5
0. 40	39. 45	1. 28	·1103	3. 55	·01680	3. 0	66·0	[illegible]
1. 30	38. 0	1. 47	·1117		***	9. 0	68·[illegible]	[illegible]
1. 47	40. 30	2. 10	·1113	6. 40	·01688	21. 0	59·8	61·[illegible]
2. 13	39. 30	2. 30	·1097	10. 55	·01586			
2. 39	34. 30	2. 40	·1105	13. 0	·01720			
3. 15	32. 10	2. 55	·1098	14. 12	·018[illegible]			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 1		Sept. 1		Sept. 1				
h m	° ′ ″	h m		h m		h m	°	°
3. 59	21. 32. 45	3. 23	·1116	17. 0	{ ·02522			
4. 12	31. 30	3. 45	·1102		·02430			
4. 26	33. 30	4. 10	·1085	21. 12	{ ·02433			
4. 48	32. 0	4. 25	·1096		·02290			
5. 0	33. 30	4. 50	·1087	22. 28	·02346			
5. 18	31. 45	5. 21	·1112	23. 59	·02286			
5. 51	18. 30	5. 40	·1107					
6. 11	26. 30	5. 55	·1147					
6. 29	21. 20	6. 11	·1111					
6. 44	22. 30	6. 30	·1116					
6. 53	26. 20	6. 57	·1092					
7. 25	27. 10	7. 25	·1097					
7. 45	26. 30	7. 48	·1088					
7. 56	25. 5	8. 7	·1092					
8. 18	24. 30	8. 30	·1082					
8. 31	22. 45	9. 0	·1084					
8. 52	26. 10	9. 22	·1081					
9. 15	30. 0	10. 0	·1084					
9. 39	28. 30	10. 10	·1094					
10. 6	30. 50	10. 47	·1086					
10. 16	30. 0	11. 9	·1092					
10. 44	32. 30	11. 25	·1088					
11. 7	30. 30	11. 45	·1092					
11. 22	31. 0	12. 27	·1091					
11. 44	29. 45	13. 8	·1100					
12. 7	30. 0	13. 25	·1089					
12. 40:	34. 20	13. 44	·1087					
13. 22	28. 40	14. 7	·1100					
13. 42	33. 45	14. 28	·1096					
13. 56	33. 40	15. 7	·1104					
14. 30	26. 50	15. 30	·1096					
14. 44	26. 50	16. 10	·1088					
15. 10	23. 50	17. 10	·1097					
	***	17. 25	·1108					
16. 12	27. 25	17. 32	·1100					
16. 35	26. 20	18. 5	·1100					
17. 15	26. 40	18. 40	·1070					
17. 28	29. 10	18. 57	·1070					
17. 41	27. 0	19. 30	·1098					
17. 52	26. 45	20. 0	·1097					
18. 14	31. 30	20. 50	·1084					
18. 40	33. 30	21. 8	·1086					
18. 59	29. 30	22. 5	·1060					
19. 18	32. 20		***					
19. 52	27. 25	23. 55	·1084					
	***		(†)					
20. 55	30. 0							
22. 11	36. 55							
22. 20	36. 30							
23. 0	38. 10							
23. 18	38. 15							
23. 45	40. 0							
23. 56	40. 30							
	(†)							
Sept. 2		Sept. 2		Sept. 2		Sept. 2		
	(†)	0. 10	·1079	0. 0	·02286	1. 0	63·2	64·4
0. 5	21. 37. 35		***	1. 40	·02106	3. 0	65·5	66·2
0. 40	38. 30	1. 55	·1088	4. 26	·01630	9. 0	67·3	67·4

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 2		Sept. 2		Sept. 2		Sept. 2		
h m	° ′ ″	h m		h m		h m	°	°
0. 59	21. 37. 20	2. 13	·1097	4. 43	·01650	21. 0	66·0	67·0
1. 10	38. 25		***	6. 18	·01587			
1. 52	34. 30	3. 47	·1101		***			
2. 21	35. 55	4. 15	·1092	10. 22	·01540			
2. 39	33. 40	4. 35	·1098	12. 42	·01566			
4. 0	31. 40	4. 53	·1124	13. 26	·01539			
4. 17	29. 0	5. 6	·1112	19. 39	{ ·01550			
4. 40	24. 0	5. 39	·1101		·01640			
4. 56	26. 35	5. 57	·1104	22. 25	·01622			
5. 12	27. 20	6. 3	·1100	23. 59	·01660			
5. 32	26. 0		***					
6. 12	28. 0	7. 36	·1099					
7. 14	27. 30	7. 53	·1104					
8. 0	15. 30	8. 14	·1124					
8. 44	26. 20		***					
9. 0	24. 30	9. 15	·1098					
9. 43	28. 45	10. 15	·1115					
9. 55	28. 30	10. 28	·1094					
10. 15	29. 35	11. 38	·1105					
10. 40	28. 30	11. 50	·1102					
12. 29	28. 30		***					
12. 44	33. 30	13. 24	·1110					
12. 56	34. 10	14. 0	·1104					
13. 39	28. 10	18. 30:	·1104					
14. 13	26. 35		***					
15. 25	25. 30	22. 25	·1062					
15. 40	24. 30	23. 10	·1074					
16. 51	26. 0	23. 59	·1075					
	***							
19. 14	22. 30							
19. 56	23. 10							
21. 37	29. 30							
22. 30	34. 30							
23. 59	36. 0							
Sept. 3		Sept. 3		Sept. 3		Sept. 3		
0. 0	21. 36. 0	0. 0	·1075	0. 0	·01660	1. 0	69·0	71·5
0. 33	36. 0		***	3. 43	·01743	3. 0	71·0	73·0
0. 58	36. 40	3. 40	·1080	8. 27:	·01695	9. 0	71·8	72·5
1. 42	35. 30	4. 0	·1087	12. 55	·01964	21. 0	68·4	69·0
3. 43	27. 50		***		·02413			
4. 30	26. 10	5. 25	·1085	17. 33	{ ·02600			
5. 11	26. 0	6. 20	·1088		·02533			
6. 34	28. 10	6. 40	·1096	20. 15	{ ·02557			
6. 52	26. 30	7. 45	·1096		·02440			
7. 10	27. 0	8. 14	·1107	22. 7	·02447			
7. 44	25. 0	9. 0	·1100	23. 59				
8. 13	21. 55	11. 30	·1101					
8. 56	27. 10	12. 20	·1098					
15. 24	27. 15	16. 0	·1099					
15. 58	26. 20	21. 12	·1082					
16. 15	26. 45	23. 14	·1097					
16. 52	25. 30	23. 59	·1091					
17. 22	26. 25							
17. 55	24. 20							
	***							
19. 28	22. 30							
22. 10	27. 30							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Sept. 3								
h m	° ′ ″	h m		h m		h m	°	°
22. 39	21. 29. 30							
23. 59	32. 20							
Sept. 4		Sept. 4		Sept. 4		Sept. 4		
0. 0	21. 32. 20	0. 0	·1091	0. 0	·02447	1. 0	69·0	69·0
2. 0	32. 10	1. 55	·1102	4. 30	·02419	3. 0	67·5	69·0
2. 29	30. 50	2. 25	·1098	7. 17	·02340	9. 0	68·8	68·0
2. 52	30. 45	2. 55	·1102	9. 56	·02347	22. 0	62·5	65·4
3. 10	29. 35	5. 0	·1093	13. 7:	·02320			
4. 55	27. 40	6. 0	·1093	18. 45:	·02544			
7. 51	27. 30	7. 11	·1102	23. 59	·02480			
8. 22	26. 20	8. 55	·1102					
8. 56	27. 15	9. 18	·1110					
9. 28	26. 20	9. 40	·1102					
10. 10	26. 50		***					
16. 44	26. 30	18. 15	·1100					
19. 35:	23. 30	20. 30	·1087					
22. 44	30. 0	22. 30	·1086					
23. 59	32. 0	23. 59	·1094					
Sept. 5		Sept. 5		Sept. 5		Sept. 5		
0. 0	21. 32. 0	0. 0	·1094	0. 0	·02480	7. 30	65·0	66·8
0. 26	32. 0	1. 15	·1095	2. 30:	·02516	21. 5	58·0	60·0
0. 54	33. 0	2. 15	·1089	5. 48	·02095			
2. 36	31. 50	2. 55	·1092	7. 44	·01916			
4. 21	28. 45	3. 15	·1087	10. 59:	·02076			
5. 1	29. 0	3. 30	·1090	14. 53	·02487 ·02417			
6. 13	28. 10	4. 6	·1084					
7. 26	28. 50	4. 47	·1085	19. 44	·02443			
16. 10	27. 0	6. 10	·1097		(†)			
20. 11	24. 15	7. 30	·1092	21. 5	·02479*			
21. 22:	26. 30	12. 20	·1100		(†)			
22. 59	33. 20	17. 0:	·1105					
23. 59	33. 30	21. 30	·1091					
		22. 30	·1090					
		23. 59	·1090					
Sept. 6		Sept. 6		Sept. 6		Sept. 6		
0. 0	21. 33. 30	0. 0	·1090	0. 0	·02437	1. 0	60·7	62·0
0. 22	33. 40	5. 0	·1093	2. 36	·02086	3. 0	62·2	63·8
0. 45	33. 0	8. 0	·1101	6. 10	·01453 ·01526	9. 0	63·0	65·0
2. 40	31. 50		***			21. 0	61·0	62·0
4. 40	28. 15	10. 20	·1104	9. 58	·01466			
6. 15	29. 10	10. 50	·1101	18. 10:	·01804			
9. 56	28. 30	12. 47	·1104	22. 0	·01850			
10. 58	27. 10	13. 15	·1108	22. 45	·01827			
12. 21	27. 30	13. 45	·1105		(†)			
12. 40	26. 40	16. 45:	·1108					
12. 52	27. 25	21. 0	·1086					
13. 40	24. 55	22. 30	·1080					
13. 51	25. 20	23. 59	·1085					
18. 40	22. 10							
19. 51	22. 35							
21. 19	26. 20							
22. 42	34. 0							
23. 59	36. 30							
Sept. 7		Sept. 7		Sept. 7		Sept. 7		
h m	° ′ ″	h m		h m		h m		
0. 0	21. 36. 30	0. 0	·1085		(†)	1. 0	[illegible]	[illegible]
1. 45	37. 0	1. 7	·1084	0. 14	·01683	3. 0	[illegible]	65·6
2. 39	35. 20	2. 41	·1093	2. 11	·01479 ·01566	9. 0	64·2	[illegible]
2. 51	35. 25	2. 59	·1101			21. 0	63·0	[illegible]
3. 13	33. 35	3. 13	·1097	10. 0	·01548			
3. 23	33. 40		***	14. 37	·01773			
4. 43	29. 0	4. 28	·1106	15. 22	·01737			
5. 51	28. 10	4. 45	·1102	17. 37	·01830			
6. 28	28. 30	5. 0	·1106	19. 45	·01817 ·01653			
	***	5. 36	·1104					
7. 32	26. 20	5. 43	·1109	21. 36	·01618			
7. 59	26. 20	6. 35	·1110	23. 4	·01537 ·01616			
8. 25	24. 30	6. 43	·1101					
8. 50	25. 50	7. 0	·1110	23. 59	·01607			
9. 0	23. 30	7. 25	·1112					
9. 12	25. 0	8. 0	·1104					
9. 51	19. 30	8. 37	·1102					
9. 58	20. 20	9. 0	·1108					
10. 13	16. 55	9. 16	·1100					
10. 24	17. 50	9. 35	·1108					
10. 40	16. 25	9. 39	·1104					
10. 54	17. 0	9. 47	·1107					
11. 26	15. 30	9. 58	·1088					
11. 51	16. 20	10. 9	·1100					
12. 14	13. 40	10. 30	·1090					
12. 51	23. 30	10. 41	·1094					
13. 13	21. 0	10. 55	·1103					
13. 22	21. 30		***					
13. 40	17. 0	12. 14	·1094					
13. 56	15. 55	12. 30	·1095					
14. 11	17. 25	13. 8	·1107					
14. 40	31. 20	13. 29	·1109					
15. 0	27. 20	13. 45	·1103					
15. 10	26. 50	14. 2	·1105					
15. 22	23. 10	14. 25	·1094					
15. 52	19. 40	14. 55	·1128					
16. 7	22. 35	15. 21	·1114					
	***	15. 55	·1125					
16. 54	21. 45	16. 24	·1112					
17. 14	20. 20	17. 45	·1113					
17. 28	21. 40	18. 45	·1100					
17. 42	21. 10	18. 57	·1103					
17. 58	22. 50		***					
18. 10	21. 20	19. 43	·1097					
18. 36	21. 10	20. 7	·1086					
18. 53	18. 50	20. 24	·1090					
	***	20. 50	·1078					
19. 40	21. 55	21. 6	·1079					
19. 43	24. 30	21. 40	·1072					
19. 49	23. 40	22. 0	·1080					
	***	22. 45	·1117					
20. 22	26. 30	23. 10	·1109					
	***	23. 59	·1108					
21. 15	32. 30							
21. 40	31. 0							
22. 0	33. 20							
22. 19	33. 10							
22. 50	36. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 7								
h m	° ′ ″	h m		h m		h m	°	°
23. 12	21. 36. 25							
23. 59	37. 45							
Sept. 8		Sept. 8		Sept. 8		Sept. 8		
0. 0	21. 37. 45	0. 0	·1108	0. 0	·01607	1. 0	66 ·3	67 ·5
3. 32	30. 0		***	3. 0	{·01690	3. 0	67 ·2	69 ·5
5. 28:	27. 30	3. 36	·1076		·01784	9. 0	65 ·5	67 ·0
7. 43	28. 55	3. 44	·1079	7. 25:	·01664	21. 0	59 ·2	61 ·0
8. 30	29. 10	4. 15	·1071	12. 34	·02157			
10. 51	26. 20		***	15. 0	{·02470			
12. 11	26. 0	6. 0	·1083		·02407			
12. 43	22. 20	6. 25	·1081	18. 11	·02416			
12. 59	24. 0	7. 14	·1087	19. 32	·02385			
13. 18	22. 40		***	22. 55	·02456			
13. 52	27. 30	8. 40	·1086	23. 59	·02392			
13. 59	27. 25	9. 15	·1091					
14. 12	29. 0	10. 50	·1086					
14. 51	22. 0	11. 30	·1090					
15. 0	26. 30	12. 5	·1105					
15. 7	26. 0	13. 0	·1094					
15. 15	28. 0	13. 26	·1098					
15. 44	22. 30	13. 32	·1094					
15. 51	23. 35	13. 57	·1105					
15. 59	21. 20	14. 25	·1113					
16. 7	22. 30		***					
16. 22	21. 30	17. 0	·1117					
16. 26	23. 0	17. 55	·1098					
17. 11	27. 50	18. 25	·1113					
17. 22	27. 45	19. 14	·1122					
17. 41	30. 50	19. 30	·1108					
17. 52	31. 40	20. 25	·1088					
18. 0	34. 0	21. 0	·1082					
18. 39	32. 45	21. 30	·1083					
18. 45	33. 20	22. 15	·1067					
19. 12	30. 50	22. 57	·1065					
19. 28	27. 30	23. 14	·1074					
19. 58	29. 40	23. 25	·1069					
20. 12	28. 20	23. 55	·1080					
	***							
20. 45	28. 0							
20. 51	28. 50							
21. 7	28. 20							
22. 10	34. 30							
	***							
22. 55	36. 35							
23. 0	35. 50							
	***							
23. 16	37. 20							
23. 30	35. 30							
23. 59	35. 20							
Sept. 9		Sept. 9		Sept. 9		Sept. 9		
0. 0	21. 35. 15	0. 0	·1077	0. 0	·02392	1. 0	63 ·0	64 ·8
	***	0. 19	·1084	1. 43	·02012	3. 0	66 ·5	68 ·0
0. 29	36. 0	0. 44	·1074	3. 9	{·01493	9. 0	67 ·4	68 ·2
0. 44	34. 20	1. 5	·1084		·01556	21. 0	65 ·2	66 ·2
1. 0	36. 0	1. 45	·1075	4. 10	·01470			
1. 11	34. 20	2. 26	·1094	8. 36	·01396			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 9		Sept. 9		Sept. 9				
h m	° ′ ″	h m		h m		h m	°	°
1. 40	21. 35. 30	2. 45	·1084	14. 0	·01412			
2. 11	31. 0		***	20. 56:	·01750			
2. 22	31. 40	4. 30	·1088	23. 59	·01560			
2. 51	30. 50	5. 17	·1083					
2. 56	31. 30		***					
5. 24	27. 30	6. 40	·1095					
6. 23	27. 30	7. 30	·1094					
6. 35	28. 35	7. 50	·1099					
8. 55	28. 0	8. 30	·1094					
12. 20	26. 30	10. 3	·1094					
12. 40	24. 0	11. 15	·1096					
12. 54	23. 30	12. 32	·1105					
13. 15	26. 20	13. 0	·1097					
13. 39	23. 30	13. 30	·1108					
13. 54	22. 15	14. 0	·1101					
14. 15	23. 0	14. 15	·1090					
14. 50	27. 55	14. 40	·1089					
15. 43	25. 30	15. 10	·1084					
	***	17. 36	·1099					
17. 45	25. 0	19. 55	·1088					
18. 42	23. 30	20. 54	·1074					
19. 21	23. 30		***					
19. 39	22. 0	22. 35	·1070					
20. 25	24. 20	23. 50	·1074					
20. 42	26. 55		(†)					
21. 12	27. 30							
22. 13	33. 40							
22. 22	33. 30							
23. 17	38. 45							
23. 43	40. 20							
23. 59	39. 50							
Sept. 10		Sept. 10		Sept. 10		Sept. 10		
0. 0	21. 39. 50		(†)	0. 0	·01560	1. 0	67 ·2	68 ·0
0. 33	36. 10	0. 30	·1078	1. 55	{·01387	3. 0	68 ·4	69 ·2
0. 42	37. 20	1. 6	·1082		·01472	9. 0	68 ·0	69 ·0
1. 10	37. 30	1. 48	·1073	10. 28:	·01426	21. 0	66 ·0	68 ·0
1. 52	35. 30	2. 11	·1081	20. 0:	·01818			
2. 10	36. 30	2. 45	·1077	23. 52	·01720			
3. 26	31. 55	3. 45	·1086		(†)			
5. 22	28. 20		***					
6. 29	28. 0	5. 15	·1081					
6. 48	28. 30	5. 30	·1087					
7. 40	27. 0		***					
15. 36	25. 30	7. 45	·1088					
16. 15	26. 10	8. 45	·1096					
16. 28	27. 0		***					
17. 26	24. 30	14. 54	·1097					
18. 9	26. 10	16. 15	·1100					
18. 52	23. 0	17. 17	·1106					
19. 22	23. 30	18. 10	·1097					
19. 44	21. 30	18. 46	·1098					
19. 55	24. 30	20. 15	·1083					
20. 10	22. 30	21. 0	·1078					
20. 16	25. 0	22. 0	·1086					
21. 17	25. 30	22. 42	·1072					
22. 52	35. 20	23. 45	·1071					

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Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.10		Sept.10						
h m	° ′ ″	h m		h m		h m	°	°
23. 10	21. 34. 50	23. 59	·1066					
23. 59	38. 30							
Sept.11		Sept.11		Sept.11		Sept.11		
0. 0	21. 38. 30	0. 0	·1066	1. 0	·01671*	1. 0	68·7	69·0
0. 15	39. 45		***	3. 0	·01493*	3. 0	68·5	69·[illegible]
0. 43	38. 20	1. 45	·1077	9. 0	·01500*	9. 0	69·0	69·5
1. 7	38. 45	2. 0	·1087	21. 30	·01354*	21. 30	62·5	62·5
1. 46	37. 20	2. 20	·1090					
1. 57	39. 0	2. 40	·1076					
2. 10	38. 20		***					
2. 15	39. 30	3. 40	·1079					
2. 43	34. 30	4. 0	·1089					
3. 0	33. 45	4. 25	·1082					
3. 24	34. 40	4. 44	·1087					
3. 44	33. 40	5. 0	·1087					
3. 55	34. 10	5. 15	·1093					
4. 52	30. 50	5. 40	·1090					
5. 58	28. 20		***					
6. 26	25. 35	6. 10	·1094					
6. 55	20. 0	6. 27	·1084					
7. 12	24. 0	7. 0	·1102					
	***		***					
7. 35	21. 0	8. 0	·1097					
7. 44	21. 50	8. 10	·1102					
8. 10	21. 35	8. 24	·1082					
8. 16	22. 0	8. 45	·1111					
8. 38	7. 0	9. 4	·1112					
8. 59	14. 50	9. 30	·1094					
9. 40	24. 10	9. 40	·1101					
9. 45	22. 10	9. 53	·1093					
9. 59	24. 45	10. 0	·1098					
10. 11	20. 30	10. 10	·1094					
10. 15	21. 50	10. 23	·1099					
10. 45	19. 30	10. 32	·1092					
10. 51	20. 0	10. 40	·1093					
11. 0	17. 20	10. 55	·1086					
11. 40	23. 55	11. 45	·1095					
12. 39	24. 10	12. 20	·1092					
13. 9	23. 30	12. 45	·1097					
13. 39	25. 15	13. 22	·1095					
14. 52	25. 0	16. 55	·1104					
15. 25	26. 0	17. 52	·1099					
16. 0	25. 30		(†)					
16. 36	26. 30	21. 14	·1090					
16. 59	25. 0	21. 55	·1079					
18. 10	24. 20	23. 0	·1057					
	(†)		***					
21. 14	26. 0	23. 48	·1052					
23. 45	39. 40	23. 59	·1041					
23. 59	39. 15							
Sept.12		Sept.12		Sept.12		Sept.12		
0. 0	21. 39. 15	0. 0	·1041	7. 8	·01650*	7. 8	75·0	75·6
0. 45	42. 5	1. 10	·1048	21. 0	·02558*	21. 0	65·0	65·5
1. 28	40. 30	1. 29	·1045					
1. 40	42. 20	1. 40	·1050					
	***	1. 57	·1046					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.12		Sept.12						
h m	° ′ ″	h m		h m		h m	°	°
2. 59	21. 35. 35	2. 14	·1057					
3. 39	35. 50	2. 24	·1052					
5. 0	30. 0	3. 20	·1059					
6. 0	20. 20	4. 22	·1051					
6. 11	20. 40	4. 41	·1060					
6. 15	17. 50	4. 53	·1051					
6. 30	16. 45	5. 10	·1057					
6. 44	20. 0	5. 35	·1059					
7. 58	26. 30	6. 0	·1058					
9. 39	22. 30	6. 27	·1068					
10. 30	25. 15	7. 10	·1061					
11. 6	21. 30	9. 2	·1077					
11. 26	26. 10	9. 15	·1072					
11. 34	24. 40	10. 20	·1079					
11. 45	26. 10	10. 40	·1076					
12. 11	22. 0	11. 12	·1114					
12. 36	21. 30	11. 53	·1082					
13. 27	22. 20	12. 15	·1091					
14. 30	29. 0	13. 15	·1082					
14. 44	28. 5	14. 1	·1084					
15. 6	29. 50	14. 15	·1079					
16. 0	24. 20	15. 40	·1093					
17. 7	25. 50	17. 37	·1098					
	***	17. 42	·1092					
19. 0	22. 30	17. 48	·1101					
19. 17	23. 20		***					
19. 39	22. 40	19. 10	·1097					
21. 5	25. 20		***					
22. 55	35. 15	21. 41	·1066					
23. 59	39. 35	22. 7	·1071					
		23. 1	·1064					
		23. 35	·1068					
		23. 59	·1064					
Sept.13		Sept.13		Sept.13		Sept.13		
0. 0	21. 39. 35	0. 0	·1064	1. 0	·02107*	1. 0	68·[illegible]	70·0
0. 28	40. 20	1. 15	·1058	3. 0	·01622*	3. 0	72·[illegible]	73·[illegible]
0. 59	39. 0		***	9. 0	·01645*	9. 0	73·0	72·5
1. 30	36. 5	4. 15	·1058	21. 6	·02341*	21. 6	64·4	64·[illegible]
1. 51	36. 30	6. 4	·1065					
3. 14	31. 50		***					
3. 50	29. 0	7. 54	·1075					
3. 56	29. 5	8. 6	·1071					
5. 0	26. 10	8. 33	·1074					
6. 49	25. 10	8. 45	·1082					
7. 22	23. 30	9. 0	·1089					
7. 55	25. 30	9. 30	·1084					
8. 13	24. 0	9. 55	·1088					
8. 40	26. 30	10. 13	·1087					
9. 0	24. 45	10. 30	·1096					
9. 15	26. 20	10. 47	·1094					
9. 30	24. 20	11. 6	·1098					
9. 46	26. 50	11. 26	·1093					
10. 15	26. 10	12. 42	·1101					
10. 42	28. 30		***					
10. 52	27. 5	13. 36	·1103					
11. 12	28. 50	14. 0	·1096					
12. 0	27. 0	14. 12	·1108					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

September 11 to 24. The time-piece giving motion to the Vertical Force cylinder having been injured was away for repair.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 13		Sept. 13						
h m	° ′ ″	h m		h m		h m	°	°
12. 22	21. 28. 10	14. 23	·1101					
	***	15. 10	·1115					
13. 11	29. 30	16. 25	·1108					
14. 0	27. 0	18. 30	·1109					
14. 11	28. 50	19. 25	·1104					
14. 22	27. 30	19. 45	·1106					
14. 37	29. 0	22. 15	·1080					
15. 30	19. 10	23. 45	·1082					
15. 53	19. 45	23. 59	·1068					
16. 28	22. 15							
17. 7	23. 15							
18. 21	21. 50							
	***							
19. 30	22. 0							
20. 12	24. 45							
20. 40	24. 25							
22. 6	30. 50							
23. 42	34. 30							
23. 46	35. 50							
23. 59	33. 30							
Sept. 14		Sept. 14		Sept. 14		Sept. 14		
0. 0	21. 33. 30	0. 0	·1068	1. 0	·01960*	1. 0	69·0	68·6
0. 51	34. 30	0. 55	·1069	3. 0	·01474*	3. 0	72·0	71·7
1. 28	37. 30	1. 9	·1074	9. 0	·01471*	9. 0	70·7	70·6
1. 51	35. 0	1. 43	·1065	21. 0	·02367*	21. 0	65·0	65·2
3. 10	32. 30	2. 45	·1070					
3. 22	32. 45	3. 5	·1066					
4. 43	28. 20	3. 30	·1072					
16. 45	24. 35	4. 19	·1070					
17. 14	25. 35	6. 35	·1076					
17. 40	24. 30	7. 40	·1086					
17. 51	25. 30	9. 45	·1082					
19. 25	22. 45		***					
19. 39	23. 25	13. 25	·1091					
20. 10	21. 45		***					
21. 15	26. 30	16. 30:	·1098					
22. 5	31. 10	19. 0	·1093					
22. 22	33. 45	20. 15	·1071					
22. 51	35. 0	23. 0	·1063					
23. 15	35. 20	23. 35	·1068					
23. 59	35. 50	23. 59	·1061					
Sept. 15		Sept. 15		Sept. 15		Sept. 15		
0. 0	21. 35. 50	0. 0	·1061	1. 0	·02282*	1. 0	67·6	67·3
0. 40	37. 45	0. 40	·1074	3. 0	·01742*	3. 0	70·2	70·0
0. 51	37. 0	0. 50	·1068	9. 0	·01489*	9. 0	69·0	69·0
1. 15	39. 30	1. 40	·1064	21. 0	·02341*	21. 0	63·0	63·6
2. 15	32. 30	2. 30	·1077					
2. 28	32. 55		***					
3. 55	28. 45	3. 53	·1075					
4. 7	29. 0	4. 10	·1083					
4. 15	27. 0	4. 47	·1075					
6. 36	26. 20	5. 25	·1084					
6. 54	26. 55	5. 50	·1087					
7. 22	24. 5	6. 29	·1080					
7. 38	25. 30	6. 51	·1087					
7. 52	20. 20	7. 5	·1082					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 15		Sept. 15						
h m	° ′ ″	h m		h m		h m	°	°
8. 7	21. 21. 45	7. 40	·1094					
8. 25	22. 0	7. 52	·1102					
9. 10	27. 55	8. 11	·1086					
9. 40	28. 20		***					
12. 40	25. 30	12. 33	·1090					
13. 10	28. 30	12. 45	·1086					
13. 50	25. 30	13. 19	·1096					
14. 10	26. 0	13. 40	·1092					
14. 45	24. 30	15. 12	·1094					
15. 22	26. 0	18. 10	·1103					
16. 29	25. 30		***					
16. 55	26. 10	23. 59	·1072					
17. 10	25. 30							
17. 51	25. 35							
18. 0	24. 30							
18. 51	24. 20							
19. 15	22. 50							
20. 10	23. 0							
21. 0	24. 30							
23. 13	32. 30							
23. 36	34. 30							
23. 59	33. 45							
Sept. 16		Sept. 16		Sept. 16		Sept. 16		
0. 0	21. 33. 45	0. 0	·1072	1. 0	·02039*	1. 0	67·0	66·7
0. 30	34. 0	3. 30	·1075	3. 0	·01474*	3. 0	70·2	70·4
4. 27	28. 40	4. 35	·1071	9. 0	·01415*	9. 0	69·7	69·0
8. 36	27. 30	6. 15	·1078	21. 0	·02341*	21. 0	64·0	64·0
9. 6	28. 5	7. 13	·1087					
9. 52	25. 0	8. 44	·1088					
10. 26	26. 20	9. 29	·1098					
10. 51	25. 35	9. 59	·1092					
11. 14	27. 0	10. 10	·1094					
11. 40	26. 20	10. 30	·1090					
11. 52	27. 35	11. 42	·1092					
13. 6:	23. 30	12. 0	·1104					
14. 6	25. 0	12. 25	·1098					
14. 35	24. 30	13. 55	·1094					
15. 40	26. 30	19. 15:	·1104					
18. 13	25. 30	21. 0	·1097					
20. 0	23. 30	22. 30	·1097					
23. 10	31. 40	23. 17	·1091					
23. 22	31. 0	23. 59	·1099					
23. 59	33. 45							
Sept. 17		Sept. 17		Sept. 17		Sept. 17		
0. 0	21. 33. 45	0. 0	·1099	1. 0	·02157*	1. 0	66·0	65·8
1. 43	32. 30	1. 35	·1099	3. 0	·01894*	3. 0	67·8	67·6
2. 10	30. 55	2. 7	·1094	9. 0	·01342*	9. 0	69·0	68·4
2. 40	30. 5	2. 15	·1098	21. 0	·02144*	21. 0	64·2	63·8
2. 50	31. 0	2. 42	·1098					
3. 10	29. 45	2. 49	·1105					
3. 40	29. 0	3. 7	·1094					
3. 46	30. 10	3. 41	·1097					
4. 58:	28. 20	3. 50	·1106					
6. 14	28. 40	4. 25	·1093					
7. 15:	26. 45	4. 31	·1098					
8. 10	27. 20	4. 45	·1086					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 17		Sept. 17						
h m	° ′ ″	h m		h m		h m	°	°
9. 10	21. 22. 30	5. 30	·1091					
9. 45	25. 10	5. 52	·1099					
11. 22	27. 0	6. 42	·1096					
13. 40	26. 0	7. 55	·1098					
18. 9	26. 0	8. 23	·1104					
20. 25:	22. 45	9. 12	·1100					
22. 12	27. 30	9. 40	·1104					
22. 59	31. 50	10. 8	·1102					
23. 59	34. 0	12. 14	·1106					
		12. 56	·1104					
		13. 15	·1108					
		15. 13	·1098					
		19. 20:	·1100					
		21. 45	·1075					
		23. 10	·1071					
		23. 59	·1075					
Sept. 18		Sept. 18		Sept. 18		Sept. 18		
0. 0	21. 34. 0	0. 0	·1075	1. 0	·02013*	1. 0	65·3	64·6
0. 50	37. 20	3. 25	·1089	3. 0	·01714*	3. 0	67·0	66·0
3. 36	30. 40	3. 40	·1085	9. 0	·01369*	9. 0	66·0	65·0
5. 10	29. 10	4. 55	·1084	22. 30	·02249*	22. 30	55·0	56·0
5. 24	28. 30	6. 24	·1093					
7. 21	27. 30	7. 10	·1093					
7. 45	26. 0	7. 31	·1099					
8. 42	26. 30	8. 7	·1092					
9. 43	24. 10	9. 10	·1095					
10. 10	25. 30	9. 21	·1090					
11. 43	25. 35	11. 40	·1104					
12. 40	27. 50	18. 5	·1122					
17. 30	26. 30	19. 8	·1121					
18. 51	23. 30	19. 55	·1133					
19. 10	24. 0		***					
19. 13	18. 0	21. 44	·1108					
19. 17	22. 0	21. 59	·1114					
	***	22. 13	·1108					
19. 42	20. 30	22. 28	·1113					
	***	22. 57	·1136					
20. 11	22. 0	23. 13	·1104					
20. 15	18. 20		(†)					
20. 42	23. 30							
20. 50	21. 40							
21. 25	29. 30							
21. 30	29. 5							
22. 4	35. 10							
22. 52	38. 30							
23. 10	38. 5							
23. 33	44. 50							
23. 52	40. 30							
23. 59	41. 0							
Sept. 19		Sept. 19		Sept. 19		Sept. 19		
0. 0	21. 41. 0		(†)	6. 37	·01750*	6. 37	60·4	59·8
0. 9	40. 20	1. 0	·1021	21. 0	·01202*	21. 0	61·0	60·6
0. 15	42. 30	2. 0	·1118					
0. 22	40. 30	2. 30	·1106					
0. 29	41. 30	3. 20	·1128					
0. 41	38. 30		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 19		Sept. 19						
h m	° ′ ″	h m		h m		h m	°	°
0. 45	21. 39. 45	4. 35	·1124					
1. 0	37. 20	4. 48	·1110					
1. 15	37. 50	5. 2	·1121					
1. 29	37. 20	5. 15	·1116					
1. 52	38. 45	5. 30	·1124					
2. 13	38. 40		***					
2. 56	33. 20	9. 5	·1126					
3. 50	33. 0		***					
4. 26	30. 20	12. 35	·1119					
4. 30	31. 10	12. 55	·1124					
4. 45	28. 0	13. 3	·1128					
5. 12	27. 20	13. 15	·1117					
	***	13. 35	·1113					
11. 40	27. 0	14. 0	·1120					
12. 39	25. 0	14. 25	·1117					
12. 45	25. 5	15. 40	·1126					
14. 22	23. 30	15. 55	·1116					
15. 0	22. 15	16. 18	·1116					
15. 14	23. 45	16. 50	·1122					
15. 29	23. 20	17. 14	·1114					
15. 52	19. 50		***					
16. 12	20. 0	18. 35	·1104					
16. 21	20. 50	19. 15	·1110					
16. 41	18. 30		***					
17. 15	21. 40	20. 45	·1098					
17. 40	21. 0	20. 55	·1106					
17. 44	22. 30	21. 27	·1101					
17. 56	21. 15	21. 41	·1088					
18. 2	22. 45	22. 0	·1098					
18. 40	21. 0		***					
19. 15	21. 10	23. 32	·1084					
19. 50	27. 40	23. 59	·1088					
19. 59	26. 0							
	***							
21. 10	24. 15							
21. 16	26. 45							
21. 29	25. 0							
21. 33	28. 20							
21. 40	27. 50							
22. 10	30. 0							
	***							
23. 30	36. 45							
23. 40	36. 0							
23. 59	39. 30							
Sept. 20		Sept. 20		Sept. 20		Sept. 20		
0. 0	21. 39. 30	0. 0	·1088	1. 0	·01447*	1. 0	62·0	61·2
0. 10	40. 35	0. 20	·1100	3. 0	·01453*	3. 0	63·7	62·8
0. 21	40. 5	1. 55	·1103	9. 0	·01452*	9. 0	64·5	64·5
0. 40	35. 35	2. 36	·1095	21. 0	·01737*	21. 0	61·0	61·2
1. 35	40. 0	2. 45	·1087					
2. 10	38. 30	3. 9	·1084					
2. 40	37. 40	3. 30	·1097					
2. 45	36. 0	3. 46	·1086					
	***	4. 15	·1124					
3. 19	34. 10	4. 41	·1108					
3. 39	36. 0	5. 15	·1100					
4. 10	23. 30	5. 30	·1111					
			***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 20		Sept. 20						
h m	° ′ ″	h m		h m		h m	°	°
4. 40	21. 40. 0	5. 58	·1115					
4. 59	31. 30	6. 10	·1108					
5. 43	30. 30	6. 35	·1096					
6. 0	31. 10	6. 55	·1109					
6. 19	28. 40	7. 15	·1100					
6. 30	29. 15	7. 41	·1098					
6. 58	27. 0	7. 56	·1084					
7. 10	27. 30	8. 16	·1091					
7. 25	24. 55	8. 40	·1079					
	***	8. 55	·1089					
7. 45	25. 30	9. 16	·1087					
7. 52	27. 5	9. 31	·1077					
8. 14	20. 10	9. 45	·1082					
8. 41	25. 0	10. 0	·1081					
8. 58	20. 40	10. 28	·1122					
9. 10	21. 10	10. 44	·1093					
9. 21	19. 55	10. 58	·1099					
9. 30	21. 0	11. 14	·1091					
9. 45	17. 30		***					
10. 4	22. 30	11. 55	·1086					
10. 25	18. 5	12. 25	·1111					
10. 43	23. 40	12. 45	·1100					
10. 58	12. 30	12. 55	·1106					
11. 17	16. 0	13. 12	·1091					
11. 45	34. 50	13. 45	·1112					
12. 24	11. 0	14. 0	·1112					
12. 29	11. 0	14. 23	·1099					
12. 50	7. 25	15. 25	·1110					
13. 1	11. 30	15. 43	·1098					
13. 14	11. 50	16. 15	·1088					
13. 41	20. 15	17. 10	·1106					
14. 6	16. 0	17. 59	·1111					
14. 24	20. 30	18. 50	·1101					
14. 44	17. 55	19. 23	·1084					
14. 54	18. 10	19. 52	·1097					
15. 10	17. 10	20. 25	·1101					
15. 34	20. 30	20. 55	·1100					
15. 40	20. 5		***					
16. 29	31. 10	22. 45	·1074					
17. 14:	24. 30	23. 0	·1078					
18. 12	26. 45	23. 23	·1070					
18. 59:	31. 0	23. 45	·1072					
19. 29	28. 55	23. 59	·1078					
19. 51	31. 0							
20. 21	29. 0							
20. 52	30. 50							
21. 22	29. 35							
21. 52	30. 50							
22. 15	32. 55							
23. 59	36. 10							
Sept. 21		Sept. 21		Sept. 21		Sept. 21		
0. 0	21. 36. 10	0. 0	·1079	1. 0	·01329*	1. 0	62·3	61·6
0. 30	35. 10	0. 55	·1088	3. 0	·01421*	3. 0	63·6	63·2
0. 50	36. 40	1. 26	·1082	9. 0	·01361*	9. 0	63·4	63·2
1. 39	35. 30	2. 7	·1085	21. 0	·01539*	21. 0	62·2	62·0
	***	2. 32	·1076					
2. 43	36. 20		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 21		Sept. 21						
h m	° ′ ″	h m		h m		h m	°	°
3. 28	21. 32. 20	3. 45	·1072					
3. 39	27. 55	4. 5	·1092					
4. 0	23. 20	4. 35	·1098					
4. 56	28. 20	5. 5	·1094					
5. 15	27. 25	5. 30	·1096					
5. 39	27. 50	5. 50	·1093					
6. 14	25. 30	6. 16	·1098					
6. 39	26. 35	6. 42	·1091					
7. 10	24. 30	7. 0	·1094					
7. 26	25. 40	7. 25	·1086					
8. 40	12. 0	7. 45	·1093					
9. 10	37. 10	7. 55	·1087					
9. 25	22. 0	8. 14	·1091					
9. 40	18. 50	8. 26	·1086					
9. 44	19. 0	8. 40	·1128					
9. 55	16. 0	8. 45	·1120					
10. 29	21. 15	8. 50	·1127					
10. 43	18. 20	9. 6	·1082					
11. 10	15. 30	9. 30	·1100					
11. 22	17. 35	9. 44	·1089					
11. 43	19. 10		***					
12. 10	14. 30	10. 35:	·1097					
13. 32	33. 55		***					
14. 28	19. 30	11. 30	·1090					
15. 15	31. 30	12. 30	·1100					
15. 48	31. 0	13. 25	·1092					
16. 0	32. 30	14. 10	·1126					
16. 49	33. 5	14. 54	·1096					
18. 39	30. 0	15. 30	·1110					
18. 45	30. 50	16. 6	·1096					
19. 6	28. 50	16. 30	·1100					
19. 14	28. 50	16. 45	·1096					
19. 27	27. 0	17. 40	·1113					
19. 50	27. 15	18. 25	·1102					
20. 7	26. 0	19. 11	·1106					
20. 39	25. 30	20. 7	·1094					
20. 54	27. 20		***					
21. 0	26. 0	21. 30	·1104					
21. 54	31. 50		***					
22. 26:	30. 15	22. 30	·1081					
23. 21	34. 0	23. 25	·1099					
23. 59	33. 35	23. 59	·1101					
Sept. 22		Sept. 22		Sept. 22		Sept. 22		
0. 0	21. 33. 35	0. 0	·1101	1. 0	·01400*	1. 0	64·7	64·0
2. 10	32. 50		***	3. 0	·01474*	3. 0	66·6	66·0
3. 10	31. 10	3. 0	·1100	9. 0	·01533*	9. 0	68·5	67·5
3. 33	32. 0	3. 38	·1113	21. 0	·02131*	21. 0	64·2	63·4
	***	4. 25	·1085					
6. 0	24. 30	4. 55	·1102					
6. 15	20. 20	5. 13	·1101					
6. 30	12. 55	5. 23	·1108					
6. 40	16. 0	5. 30	·1098					
6. 45	14. 30	5. 52	·1107					
6. 59	24. 30		***					
7. 12	22. 55	6. 16	·1104					
7. 26	26. 50	6. 18	·1096					
7. 51	24. 20	6. 32	·1114					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.22		Sept.22						
h m	° ′ ″	h m		h m		h m	°	°
8. 10	21. 24. 20	6. 44	·1099					
8. 22	26. 20	6. 50	·1106					
8. 45	22. 50	7. 2	·1090					
9. 13	25. 10	7. 14	·1096					
9. 41	21. 17. 0	7. 27	·1086					
10. 12	20. 56. 10	7. 54	·1086					
10. 52	21. 24. 30	8. 28	·1106					
11. 0	25. 15	8. 55	·1101					
11. 24	21. 0	9. 1	·1118					
11. 40	20. 15	9. 14	·1088					
11. 47	21. 20	9. 30	·1112					
12. 15	17. 0	9. 39	·1102					
12. 45	19. 50		***					
13. 25	19. 0	10. 14	·1108					
13. 36	22. 50	10. 25	·1075					
13. 46	32. 0	10. 40	·1092					
13. 56	32. 0	11. 2	·1068					
15. 0	20. 20	11. 40	·1079					
15. 39	25. 30		***					
17. 0	26. 40	12. 21	·1072					
17. 24	25. 30	12. 39	·1080					
17. 40	26. 20		***					
19. 45	22. 55	13. 27	·1073					
21. 40	26. 20	13. 38	·1081					
23. 59	32. 55	13. 45	·1075					
			***					
		15. 15	·1092					
		15. 45	·1090					
		17. 40:	·1096					
		21. 40:	·1072					
			***					
		23. 59	·1072					
Sept.23		Sept.23		Sept.23		Sept.23		
0. 0	21. 32. 55	0. 0	·1073	1. 0	·01627*	1. 0	66·5	65·5
0. 20	33. 30	2. 5	·1071	3. 0	·01563*	3. 0	68·0	66·5
2. 1	32. 40	4. 25	·1084	9. 30	·01500*	9. 30	64·0	64·0
5. 9	28. 10		***	21. 0	·02078*	21. 0	62·0	61·8
7. 27	26. 35	10. 25	·1104					
12. 40	27. 20		***					
13. 21	26. 15	16. 7	·1116					
15. 0	26. 30	16. 45	·1102					
15. 45	24. 40	17. 10	·1112					
16. 9	25. 55	17. 43	·1096					
16. 21	24. 30		***					
16. 52:	28. 40	19. 5:	·1107					
17. 12	26. 40	21. 6	·1061					
17. 36	26. 40	21. 40	·1062					
17. 55	25. 40	22. 0	·1054					
18. 9	27. 0	22. 45	·1054					
18. 15	24. 15		***					
	***	23. 59	·1072					
18. 52	22. 30							
19. 8	23. 20							
19. 21	21. 30							
19. 59	21. 10							
20. 25	23. 30							
20. 52	23. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.23								
h m	° ′ ″	h m		h m		h m		
21. 37	21. 30. 30							
	***							
22. 14	32. 10							
	***							
22. 36	34. 40							
	***							
23. 30	39. 10							
23. 50	37. 40							
23. 58	38. 30							
Sept.24		Sept.24		Sept.24		Sept.24		
0. 10	21. 37. 20	0. 0	·1072	1. 0	·02152*	1. 0	63·[illegible]	62·[illegible]
0. 41	37. 55	1. 30	·1094	3. 0	·01978*	3. 0	64·0	63·[illegible]
1. 0	40. 40	2. 20	·1068	9. 0	·02036*	9. 0	62·5	63·0
1. 10	40. 0	3. 5	·1088	21. 0	·02333*	21. 0	53·0	54·0
1. 26	40. 30	3. 51	·1076					
1. 30	41. 10	4. 10	·1094					
	***	4. 31	·1098					
2. 40	35. 0	5. 0	·1106					
3. 0	35. 30	5. 12	·1102					
3. 31	31. 55	5. 26	·1106					
3. 44	32. 0	5. 40	·1099					
4. 4	27. 30	5. 52	·1107					
	***	6. 15	·1100					
4. 51	24. 0	6. 29	·1083					
5. 3	24. 30	6. 55	·1098					
5. 22	22. 35	7. 23	·1094					
5. 39	24. 30	7. 46	·1093					
5. 45	21. 20	8. 6	·1101					
6. 11	20. 30	8. 12	·1096					
6. 24	26. 20	8. 30	·1126					
6. 39	22. 25	8. 55	·1085					
7. 13	28. 10	9. 15	·1132					
8. 10	26. 40	9. 25	·1124					
8. 28	13. 45	9. 40	·1093					
8. 45	19. 50	9. 45	·1097					
9. 21	4. 0	9. 55	·1084					
9. 32	8. 50	10. 9	·1094					
9. 42	8. 0	10. 26	·1084					
10. 15	20. 20	10. 49	·1091					
10. 43	16. 0	11. 0	·1088					
10. 51	16. 5	11. 15	·1106					
11. 0	15. 0	11. 40	·1082					
11. 14	15. 55	12. 10	·1113					
11. 36	23. 30	12. 36	·1107					
12. 0	21. 40		***					
12. 22	28. 0	13. 36	·1116					
12. 39	28. 40	13. 55	·1108					
12. 45	27. 0		***					
13. 39	24. 30	16. 30	·1124					
13. 45	26. 0		***					
13. 56	24. 50	19. 45	·1123					
14. 21	26. 0	21. 55	·1100					
14. 29	25. 30	22. 45	·1098					
14. 45	26. 50		(†)					
15. 27	25. 30							
15. 59	27. 20							
16. 13	26. 20							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept.24								
h m	° ′ ″	h m		h m		h m	°	°
16. 21	21. 26. 45							
16. 41	25. 0							
16. 51	27. 30							
	***							
18. 41	24. 10							
	***							
20. 13	23. 40							
20. 18	22. 30							
20. 28	24. 30							
20. 45	24. 30							
21. 57	30. 50							
22. 29	32. 30							
22. 45	31. 30							
23. 10	33. 15							
23. 15	32. 20							
23. 29	33. 10							
23. 43	32. 20							
23. 59	32. 20							
Sept.25		Sept.25		Sept 25		Sept.25		
0. 0	21. 32. 20		(†)		(†)	1. 0	57 ·2	58 ·0
	***	1. 0	·1112*	1. 0	·01980*	3. 0	60 ·7	61 ·8
1. 0	33. 30	2. 0	·1108	1. 52	·01662	9. 0	63 ·0	64 ·0
	***		***	5. 33	·01659	22. 38	58 ·0	59 ·2
2. 39	31. 50	4. 0	·1107	5. 40	·01718			
3. 59	27. 50	4. 12	·1117	6. 10	{·01650			
4. 13	28. 30	4. 30	·1117		·01683			
4. 43	27. 10	4. 45	·1106	11. 7	·01576			
4. 52	27. 50		***	13. 40	·01629			
5. 15	26. 30	5. 21	·1114	18. 15	·02087			
5. 50	27. 50	5. 35	·1106	21. 22	·02432			
6. 16	20. 20	5. 45	·1107	22. 13	·02453			
6. 40	23. 40	6. 7	·1087	23. 0	·02493			
6. 51	22. 15	6. 30	·1111	23. 59	·02460			
7. 11	26. 30	6. 40	·1101					
7. 27	25. 10	7. 5	·1108					
7. 56	26. 45		***					
9. 29	25. 25	8. 6	·1116					
9. 52	21. 10	9. 26	·1124					
10. 13	26. 30	9. 36	·1121					
10. 26	24. 20	9. 52	·1131					
10. 40	24. 50	10. 15	·1119					
11. 11	24. 0	10. 30	·1124					
11. 22	25. 0	10. 53	·1126					
12. 0	23. 55	11. 14	·1121					
13. 10	28. 30	11. 50	·1121					
13. 37	24. 5	12. 16	·1126					
14. 12	21. 15	12. 40	·1122					
	***	13. 15	·1135					
14. 52	24. 0		***					
	***	14. 30	·1129					
15. 40	23. 40		***					
15. 54	21 0	15. 53	·1138					
16. 13	21. 30	16. 36	·1126					
16. 58	26. 30	17. 55	·1130					
17. 21	25. 0	18. 7	·1122					
17. 51	26. 30		***					
18. 7	26. 20	18. 55	·1129					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept.25		Sept.25						
h m	° ′ ″	h m		h m		h m	°	°
18. 28	21. 23. 35	19. 45	·1127					
	***	20. 14	·1107					
18. 43	25. 0	20. 54	·1102					
	***	21. 24	·1114					
19. 35	22. 45	22. 1	·1100					
19. 44	24. 30	22. 15	·1084					
	***		***					
21. 6	22. 30	23. 20	·1105					
21. 22	26. 20	23. 59	·1102					
21. 56	29. 15							
22. 10	28. 40							
	***							
22. 39	31. 30							
	***							
23. 59	31. 40							
Sept.26		Sept.26		Sept.26		Sept.26		
0. 0	21. 31. 40	0. 0	·1102	0. 0	·02460	7. 0	64 ·0	65 ·0
0. 29	32. 20		***	1. 40	·02293	21. 0	62 ·5	64 ·0
0. 51	33. 40	1. 44	·1107	5. 6	{·01686			
1. 15	32. 30	1. 55	·1100		·01737			
1. 39	33. 45	2. 55	·1097	10. 45	{·01640			
1. 58	31. 45	3. 30	·1110		·01880			
2. 12	32. 20	3. 45	·1105	14. 51:	·01796			
2. 57	28. 40	4. 10	·1105	20. 52	·01856			
3. 27	29. 50	4. 55	·1118	23. 59	·01839			
3. 45	27. 20	5. 38	·1104					
4. 34	27. 25	5. 55	·1113					
5. 57	23. 10	6. 25	·1120					
6. 0	22. 0	7. 25	·1121					
6. 15	21. 45	8. 44	·1115					
6. 31	23. 30	8. 54	·1136					
7. 30	26. 10	9. 13	·1124					
8. 0	25. 35	9. 30	·1137					
8. 51	23. 50	10. 39	·1114					
8. 58	20. 20	11. 0	·1108					
9. 7	21. 45	11. 30	·1112					
9. 29	17. 55	11. 55	·1109					
9. 45	21. 30	12. 15	·1116					
10. 23	19. 30	12. 55	·1111					
11. 13	20. 20	13. 10	·1116					
	***		***					
12. 58	27. 20	17. 14	·1111					
13. 28	24. 30	18. 40:	·1114					
	***	20. 54	·1095					
18. 0	24. 30		***					
20. 25	21. 30	23. 6	·1085					
21. 30	22. 50	23. 59	·1090					
23. 27	29. 50							
23. 59	30. 30							
Sept.27		Sept.27		Sept.27		Sept.27		
0. 0	21. 30. 30	0. 0	·1090	0. 0	·01839	1. 0	63 ·5	64 ·8
0. 30	30. 50	0. 40	·1091	2. 37	·01750	3. 0	64 ·2	66 ·0
0. 40	30. 0	1. 15	·1098	2. 45	·01843	9. 0	64 ·5	65 ·0
1. 11	31. 30	2. 25	·1096	4. 52	·01766	21. 0	61 ·2	63 ·0
1. 56	31. 30	3. 25	·1102	5. 12	·01849			
2. 33	33. 40	4. 29	·1101	12. 0:	·01886			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.27		Sept.27		Sept.27				
h m	° ′ ″	h m		h m		h m	°	°
4. 11	21. 29. 30	6. 8	·1111	20. 27:	·02467			
5. 43	26. 20		***	23. 59	·02396			
9. 29	23. 35	8. 50	·1113					
9. 50	24. 30	10. 12	·1126					
10. 5	23. 45	10. 45	·1122					
11. 19	25. 30	12. 30	·1122					
12. 32	25. 10	14. 15	·1128					
12. 52	27. 5	18. 25	·1124					
13. 27	25. 50	20. 10	·1118					
13. 54	26. 20	21. 35	·1110					
15. 21	24. 0	23. 30	·1106					
16. 30	24. 30	23. 59	·1108					
19. 29	22. 0							
21. 8	20. 30							
22. 0	21. 20							
23. 49	29. 50							
23. 59	29. 55							
Sept.28		Sept.28		Sept.28		Sept.28		
0. 0	21. 29. 55	0. 0	·1108	0. 0	·02396	1. 0	61·8	63·3
0. 59	31. 10	0. 45	·1105	6. 30	·02087	3. 0	62·0	64·0
1. 21	32. 30		***	14. 5:	·01955	9. 0	62·1	64·0
1. 54	32. 30	2. 17	·1109	20. 16	·02040	21. 0	62·0	63·5
2. 5	33. 10	6. 0	·1128	23. 0	·01912			
2. 27	32. 10	6. 45	·1122	23. 59	·01895			
3. 13	32. 0	8. 7	·1127					
3. 37	30. 30	8. 40	·1122					
6. 30	25. 10	10. 2	·1126					
	***	10. 30	·1120					
8. 11	24. 30	11. 11	·1126					
9. 54	25. 0		***					
10. 2	23. 50	12. 55	·1124					
11. 37	22. 30	13. 50	·1130					
12. 2	24. 30	19. 50:	·1127					
12. 40	23. 30		***					
14. 28	25. 10	23. 0	·1093					
	***	23. 22	·1095					
18. 21	22. 30	23. 48	·1089					
19. 42	19. 20	23. 59	·1090					
20. 52	19. 20							
	***							
23. 7	26. 0							
23. 22	28. 20							
23. 45	28. 30							
23. 59	31. 0							
Sept.29		Sept.29		Sept.29		Sept.29		
0. 0	21. 31. 0	0. 0	·1091	0. 0	·01895	1. 0	65·0	65·8
0. 39	30. 40		***	1. 58	·01716 ·01764	3. 0	67·3	68·2
1. 7	32. 35	3. 0	·1099			9. 0	68·0	69·0
2. 15	33. 45	3. 35	·1103	5. 7	·01760 01990	21. 0	65·0	66·0
3. 25	32. 30	3. 50	·1096					
3. 43	30. 30	4. 30	·1099	8. 10	·01872			
6. 7	26. 20	5. 5	·1095	12. 10	·01937			
7. 42	24. 0	6. 6	·1104	15. 55	·02096			
9. 5	25. 30		***	20. 55:	·02387			
9. 39	21. 30	7. 35	·1107	23. 59	·02308			
11. 10	21. 20	7. 53	·1112					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.29		Sept.29						
h m	° ′ ″	h m		h m		h m		
11. 54	21. 24. 0	8. 15	·1109					
12. 12	23. 30	8. 25	·1106					
13. 0	26. 0	8. 50	·1112					
13. 27	24. 20	9. 40	·1107					
15. 11	25. 25	9. 53	·1114					
15. 14	27. 45	10. 30	·1106					
15. 50	24. 20	11. 16	·1114					
15. 54	25. 0	11. 40	·1110					
16. 12	23. 30	12. 0	·1116					
16. 24	24. 20	12. 24	·1112					
16. 49	23. 0	13. 0	·1117					
18. 39	21. 15	14. 30	·1113					
18. 45	20. 0	15. 20	·1129					
19. 7	19. 30	19. 10	·1128					
19. 15	20. 0	20. 40	·1110					
19. 44	18. 30	21. 8	·1112					
20. 40	17. 10	21. 45	·1102					
21. 0	19. 50	23. 59	·1100					
21. 35	20. 5							
21. 53	22. 0							
22. 0	21. 45							
23. 53	33. 55							
23. 59	33. 45							
Sept.30		Sept.30		Sept.30		Sept.30		
0. 0	21. 33. 45	0. 0	·1100	0. 0	·02308	1. 0	67·0	67·5
1. 12	35. 45	0. 45	·1102	1. 43	·02157	3. 0	67·2	[illegible]
1. 40	38. 10	1. 13	·1092	3. 13	·01870 ·02163	9. 0	64·0	66·0
1. 55	36. 20	1. 44	·1093			21. 0	55·0	55·2
2. 30	35. 30	2. 6	·1084	4. 49	·02190			
2. 37	37. 20	2. 32	·1079	4. 56	·02233			
2. 55	34. 40	3. 30	·1091	7. 43	·02346			
3. 40	33. 0	3. 40	·1103	9. 45	·02752 ·02700			
3. 43	33. 50	4. 0	·1095					
4. 0	31. 50		***	14. 13	·02603			
4. 15	31. 45	6. 37	·1109	22. 54	·02517			
5. 40	28. 45	7. 8	·1097	23. 59	·02438			
6. 14	16. 30		***					
7. 0	26. 55	8. 45	·1092					
7. 52	27. 30	9. 54	·1101					
8. 27	25. 20	10. 14	·1100					
	***	10. 19	·1097					
9. 27	24. 30	11. 13	·1101					
9. 52	25. 35	11. 40	·1099					
10. 28	24. 30	12. 39	·1108					
11. 14	24. 55	13. 15	·1107					
11. 28	24. 15	13. 54	·1114					
12. 45	26. 15	15. 0:	·1110					
13. 14	26. 10		***					
13. 30	23. 20	19. 30:	·1125					
14. 12:	21. 0		***					
15. 11	23. 30	22. 45	·1098					
16. 14	24. 50	23. 30	·1104					
16. 21	24. 5	23. 44	·1097					
16. 37	24. 50	23. 59	·1101					
	***							
19. 17	21. 20							
19. 27	21. 50							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 30								
h m	° ′ ″	h m		h m		h m	°	°
19. 59	21. 19. 40 ***							
21. 22	24. 20							
21. 28	23. 25							
22. 30	26. 25							
22. 40	26. 20							
23. 28	31. 40							
23. 39	31. 0							
23. 50	33. 10							
23. 59	34. 15							
Oct. 1		Oct. 1		Oct. 1		Oct. 1		
0. 0	21. 34. 15	0. 0	·1101	0. 0	·02438	1. 0	60·0	62·5
0. 10	35. 0	0. 10	·1099	1. 22	·02160	3. 0	62·0	63·0
0. 40	35. 0	0. 31	·1091	3. 10	·01638	9. 0	62·0	63·0
0. 52	37. 20	0. 50	·1098	4. 43	·01673	21. 0	58·0	59·0
1. 9	36. 30	1. 5	·1092	8. 26	·01577			
2. 10	37. 10	2. 10	·1095	10. 26	·01606			
3. 2	33. 50	2. 30	·1093	12. 40	·01765			
3. 20	34. 20	3. 17	·1096	16. 57	·02258			
3. 51	32. 30	3. 30	·1092 ***	19. 37	·02456			
4. 2	32. 55			21. 10	{ ·02500 ·02412			
4. 26	30. 30	4. 40	·1098					
4. 44	30. 10	5. 5	·1093	22. 37	·02366			
5. 21	26. 30	5. 23	·1098	23. 59	·02169			
5. 33	26. 55	5. 35	·1096					
6. 35	24. 30 ***	6. 52	·1102					
		7. 37	·1092					
7. 56	16. 30	8. 0	·1109					
8. 21	20. 0	8. 30	·1104 ***					
8. 29	19. 45							
9. 22	23. 55	9. 50	·1121 ***					
9. 45	23. 50							
9. 52	22. 10	10. 41	·1122					
10. 0	22. 20	11. 30	·1117					
10. 31	18. 30	12. 25	·1129					
10. 57	21. 30	13. 9	·1128					
11. 20	22. 30	13. 50	·1121					
11. 40	21. 45	14. 15	·1127					
12. 26	25. 0	15. 0	·1124					
12. 43	22. 30	16. 36	·1135					
13. 39	21. 30	17. 55	·1129					
13. 48	27. 30	18. 15	·1136 ***					
14. 19	26. 30							
14. 37	26. 50	20. 0:	·1138					
14. 50	25. 30	20. 52	·1125					
15. 40	28. 20	21. 30:	·1124					
16. 44	26. 20	22. 25	·1102 ***					
16. 59	26. 30							
17. 29	28. 55	23. 30	·1101					
17. 40	28. 55	23. 59	·1095					
18. 0	31. 25							
18. 52	25. 30 ***							
20. 22	21. 20							
20. 37	22. 30							
20. 52	21. 50							
22. 20	27. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 1								
h m	° ′ ″	h m		h m		h m	°	°
22. 36	21. 30. 0							
23. 6	30. 0							
23. 14	31. 40							
23. 59	32. 30							
Oct. 2		Oct. 2		Oct. 2		Oct. 2		
0. 0	21. 32. 30	0. 0	·1095	0. 0	·02169	1. 0	62·0	62·8
0. 44	35. 50	1. 45	·1093	1. 7	·02036	3. 0	64·5	66·0
1. 28	34. 30	2. 30	·1113	2. 40	{ ·01686 ·01756	9. 0	64·0	65·5
1. 39	35. 55	2. 50	·1103			22. 30	59·0	60·0
1. 59	35. 30	3. 6	·1109	3. 30	{ ·01782 ·01950			
2. 22	36. 40	3. 14	·1097					
2. 45	33. 30	3. 24	·1102	6. 21:	·01737			
2. 52	34. 20	3. 45	·1122 ***	11. 12	·01926			
3. 1	30. 0			12. 40	·02048			
3. 28	24. 45	4. 22	·1107	14. 28	·02356			
4. 4	29. 0	6. 10	·1110	15. 11	·02370			
5. 35	26. 30	6. 14	·1120 ***	15. 52	·02516			
5. 43	27. 0			16. 52	·02616			
6. 5	25. 30	7. 8	·1111	21. 27	·02670			
6. 26	26. 40	7. 35	·1120	23. 59	·02509			
8. 40	23. 30	8. 0	·1109					
9. 0	21. 30	8. 15	·1117					
9. 36	17. 30	8. 25	·1111					
10. 1	19. 20	8. 36	·1110					
10. 12	21. 20	8. 59	·1117					
10. 21	18. 30	9. 25	·1113					
10. 28	19. 30	9. 44	·1117					
10. 43	12. 30	10. 0	·1113					
11. 9	20. 20	10. 13	·1100					
11. 26	17. 10	10. 30	·1100					
11. 40	22. 30	10. 45	·1126					
11. 48	22. 30	11. 2	·1128					
12. 3	24. 10	11. 15	·1118					
12. 40	19. 20	11. 30	·1118					
13. 1	18. 5	11. 42	·1131					
13. 15	18. 40	12. 7	·1124					
13. 27	17. 55	12. 37	·1131 ***					
14. 30	33. 30							
15. 10	17. 50	13. 39	·1128					
15. 44	26. 10	14. 0	·1133 ***					
16. 28	24. 50							
16. 52	29. 0 ***	14. 40	·1127					
		15. 27	·1143					
17. 44	28. 25	16. 9	·1140					
17. 59	29. 30	16. 30	·1129					
18. 43	26. 40	17. 0	·1126					
19. 12	28. 50	17. 23	·1130					
19. 51	26. 55	17. 30	·1123 ***					
20. 13	29. 20							
21. 0	35. 40	19. 0	·1134					
21. 50	31. 35 ***	19. 43	·1125					
		19. 55	·1113					
22. 15	31. 30	20. 0	·1114					
22. 27	33. 55 ***	20. 15	·1100					
		20. 50	·1100					
23. 45	34. 30	21. 6	·1106					
23. 59	33. 50	21. 24	·1098					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	° ′ ″	Oct. 2 h m		h m		h m	°	°
		22. 36	·1074					
			***					
		23. 45	·1090					
		23. 59	·1087					
Oct. 3		Oct. 3		Oct. 3		Oct. 3		
0. 0	21. 33. 50	0. 3	·1086	0. 0	·02509	6. 45	65·0	65·5
0. 22	32. 35	0. 39	·1098	4. 58	·01684	21. 0	61·3	62·0
0. 40	34. 45	1. 0	·1088		·01788			
1. 10	32. 35	1. 48	·1104	6. 55	·01710			
	***	2. 0	·1096		·01773			
2. 12	34. 10	2. 28	·1091	11. 15:	·01736			
2. 40	31. 5	3. 42	·1110	21. 45	·02222			
2. 56	31. 20		***	23. 0	·02211			
3. 32	29. 0	4. 53	·1098		(†)			
3. 47	29. 30	5. 15	·1117					
4. 44	27. 10	5. 48	·1096					
5. 15	13. 20	6. 3	·1106					
5. 45	22. 55		***					
7. 24	26. 30	8. 55	·1120					
10. 50	25. 20	10. 45	·1123					
11. 40	26. 0		***					
11. 50	29. 10	13. 30	·1131					
12. 15	26. 40	14. 37	·1128					
12. 58	26. 45	15. 5	·1134					
13. 30	25. 20	15. 45	·1126					
13. 40	26. 30	17. 30	·1123					
13. 52	26. 20	19. 39	·1126					
14. 9	27. 20	21. 8	·1112					
15. 6	23. 30	23. 0	·1096					
16. 39	24. 30	23. 59	·1102					
16. 58	25. 50							
18. 59	21. 25							
	***							
19. 29	22. 50							
19. 56	21. 45							
21. 28	22. 0							
	***							
23. 59	33. 20							
Oct. 4		Oct. 4		Oct. 4		Oct. 4		
0. 0	21. 33. 20	0. 0	·1101		(†)	1. 0	64·0	64·0
0. 22	33. 40		***	1. 0	·02023*	3. 0	65·0	65·0
0. 29	33. 30	1. 0	·1104	1. 15	·02010	9. 0	64·0	64·7
0. 35	34. 45	1. 27	·1091	2. 40	·01826	21. 0	56·0	58·0
0. 45	33. 40	1. 50	·1103		·02000			
0. 50	34. 30	4. 20	·1107	3. 40	·01884			
1. 22	32. 50	5. 11	·1119	4. 39	·01882			
1. 45	34. 50	5. 45	·1106		·02042			
	***	6. 20	·1130	6.′21	·02076			
2. 11	32. 30	6. 55	·1120	7. 51	·02079			
2. 22	33. 10		***	9. 21	·02140			
5. 13	26. 30	11. 36	·1141	11. 52	·02170			
6. 10	12. 30	12. 15	·1132	14. 12	·02300			
6. 43	24. 30	12. 52	·1140	16. 43	·02604			
6. 52	24. 20	13. 15	·1136	19. 12	·02622			
7. 10	26. 30	13. 27	·1141		·02178			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 4 h m	° ′ ″	Oct. 4 h m		Oct. 4 h m		h m	°	°
9. 43	21. 26. 30	13. 59	·1127	20. 52	·02444			
10. 13	25. 30	14. 30	·1129		·02368			
10. 35	25. 40	15. 15	·1142	21. 40	·02457			
10. 44	27. 45	16. 37	·1132		·02366			
10. 58	25. 50	17. 0	·1150	22. 15	·02396			
11. 15	26. 20		***		·02356			
11. 51	23. 20	18. 14	·1135	23. 5	·02376			
12. 28	25. 30	18. 32	·1132	23. 59	·02387			
12. 32	25. 0	19. 10	·1129					
13. 45	29. 35	19. 42	·1134					
13. 57	28. 30	21. 16	·1118					
14. 21	28. 0	22. 52	·1107					
14. 45	30. 20	23. 59	·1104					
15. 29	26. 5							
16. 10	25. 35							
16. 40	32. 30							
16. 53	30. 30							
17. 1	30. 20							
17. 37	27. 30							
18. 15	24. 50							
18. 33	25. 30							
18. 50	25. 0							
18. 55	23. 10							
19. 0	24. 50							
19. 10	21. 30							
19. 13	23. 35							
	***							
20. 0	21. 0							
20. 30	21. 10							
22. 13	24. 30							
23. 59	32. 30							
Oct. 5		Oct. 5		Oct. 5		Oct. 5		
0. 0	21. 32. 30	0. 0	·1104	0. 0	·02387	1. 0	60·0	60·0
0. 38	34. 20	1. 30	·1113	2. 10	·02130	3. 0	61·0	62·0
0. 43	36. 0		***	6.′40:	·01626	9. 0	58·0	60·0
0. 51	35. 20	2. 6	·1125	13. 40	·02507	21. 0	51·0	53·0
2. 14	37. 30	2. 30	·1112	14. 28	·02550			
2. 32	34. 5	3. 33	·1113		·02466			
3. 13	33. 0	6. 6	·1128	22. 22	·02517			
3. 21	33. 55	9. 7	·1133		·02277			
3. 36	31. 50	13. 36	·1140	23. 59	·02172			
4. 43	28. 0	13. 44	·1147					
7. 45	24. 50	13. 55	·1142					
8. 40	26. 10	15. 55	·1147					
9. 54	25. 30	16. 30	·1158					
11. 53	26. 30	17. 10	·1147					
13. 30	26. 30	17. 50	·1155					
13. 37	27. 40		***					
13. 59	26. 20	19. 22	·1148					
14. 42	25. 30	20. 5	·1122					
15. 39	27. 10	20. 15	·1122					
15. 58	30. 50	20. 30	·1126					
16. 52	23. 55	20. 55	·1128					
17. 42	27. 50	22. 30	·1102					
	***		***					
19. 7	25. 30	23. 8	·1106					
19. 59	21. 0	23. 59	·1090					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 5								
h m	° ′ ″	h m		h m		h m	°	°
20. 15	21. 21. 0							
20. 29	23. 45							
20. 39	23. 5							
21. 14	25. 20							
21. 39	23. 40							
22. 12	26. 30							
22. 37	27. 0							
23. 2	33. 30							
23. 25	33. 50							
23. 38	35. 40							
23. 52	37. 20							
Oct. 6		Oct. 6		Oct. 6		Oct. 6		
0. 4	21. 35. 30	0. 0	·1090	0. 0	·02172	1. 0	55 ·5	56 ·0
0. 39	39. 45	0. 35	·1117	0. 36	·02126	3. 0	59 ·0	59 ·0
1. 0	37. 35	1. 11	·1115	2. 31	·01700	9. 0	59 ·5	60 ·3
1. 11	39. 0	1. 40	·1108		***	21. 0	56 ·0	58 ·0
1. 43	38. 50	1. 55	·1114	5. 15	{ ·01687			
1. 50	40. 0	2. 0	·1108		·01882			
2. 8	39. 35	2. 25	·1110	8. 43:	·01636			
2. 30	43. 30	2. 51	·1094*	13. 25	·01827			
2. 51	39. 30	2. 58	·1098	14. 55	·01856			
3. 30	33. 10	3. 45	·1088	19. 43:	·02110			
3. 46	33. 30	4. 1	·1102	23. 59	·01948			
3. 55	31. 55	4. 15	·1096					
4. 10	32. 30	4. 30	·1106					
4. 27	29. 20	4. 44	·1101					
4. 40	30. 50	4. 17	·1113					
5. 15	26. 50	5. 46	·1100					
5. 40	30. 0	6. 15	·1112					
6. 15	25. 0	8. 5	·1121					
6. 44	25. 30	8. 27	·1120					
7. 42	23. 0		***					
8. 51	25. 0	13. 0	·1133					
9. 50	22. 30	13. 40	·1145					
10. 13	23. 45	14. 16	·1135					
11. 40	23. 30	14. 32	·1150					
11. 52	26. 30	14. 45	·1149					
12. 40	26. 45	15. 0	·1137					
13. 4	24. 0	15. 40	·1132					
13. 57	24. 45	16. 40:	·1141					
14. 21	33. 20	18. 8	·1138					
14. 50	26. 20	19. 30	·1123					
	***	20. 0	·1131					
17. 48	23. 30		***					
18. 13	24. 55	20. 45	·1124					
18. 39	23. 10	21. 15	·1124					
19. 25	25. 30	22. 41	·1108					
19. 59	24. 40	23. 59	·1104					
20. 4	26. 10							
20. 16	24. 30							
20. 23	25. 30							
20. 38	23. 0							
20. 42	23. 35							
21. 51	25. 30							
	***							
23. 59	34. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 7		Oct. 7		Oct. 7		Oct. 7		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 34. 35	0. 0	·1104	0. 0	·01948	1. 0	59 ·0	60 ·0
0. 43	37. 50	0. 30	·1102	2. 10	{ ·01725	3. 0	61 ·0	63 ·0
2. 40	35. 50	0. 45	·1107		·01810	9. 0	61 ·8	63 ·5
2. 48	36. 50	0. 58	·1101	2. 48	{ ·01796	21. 0	54 ·0	56 ·0
3. 29	33. 30	1. 39	·1101		·01940			
3. 40	34. 20	1. 51	·1096	3. 45	·01825			
4. 5	31. 50	2. 20	·1105	7. 25	·01752			
4. 21	32. 0	2. 50	·1120	7. 56	·01710			
5. 30	26. 20	3. 25	·1103	9. 52	·01732			
5. 52	27. 10		***	13. 39:	·02016			
6. 15	25. 10	3. 54	·1104	17. 30	·02680			
6. 43	13. 20	4. 17	·1117	18. 10	{ ·02688			
6. 52	23. 0	4. 36	·1110		·02438			
7. 12	16. 20	4. 52	·1110	20. 2	·02507			
7. 27	21. 10	5. 30	·1122	21. 36	{ ·02570			
7. 40	22. 30		***		·02500			
7. 48	25. 5	6. 23	·1108	23. 59	·02550			
7. 56	24. 0	6. 39	·1118					
8. 5	24. 45	6. 45	·1138					
8. 28	23. 30	7. 0	·1127					
9. 40	24. 30	7. 13	·1140					
10. 11	23. 15	7. 46	·1117					
11. 13	25. 10	8. 15	·1115					
12. 0	23. 0	9. 45	·1124					
13. 7	25. 30	10. 30	·1120					
13. 28	27. 30	10. 54	·1122					
14. 30	26. 5	11. 12	·1130					
15. 39	28. 30	12. 55	·1123					
17. 38	27. 30	15. 45:	·1125					
19. 15	24. 20	18. 14	·1136					
19. 45	26. 30	19. 0	·1133					
20. 40	25. 30	20. 5	·1120					
21. 54	27. 45	20. 30	·1119					
22. 30	30. 30	21. 8	·1108					
23. 59	33. 20	23. 0	·1102					
		23. 59	·1106					
Oct. 8		Oct. 8		Oct. 8		Oct. 8		
0. 0	21. 33. 20	0. 0	·1106	0. 0	·02550	1. 0	56 ·0	57 ·0
	***	1. 23	·1116	1. 40	·02486	3. 0	58 ·0	59 ·5
1. 0	32. 45	1. 38	·1112	4. 50	·01925	9. 0	58 ·0	59 ·0
1. 26	33. 50		***	9. 52	·01833	21. 0	49 ·0	51 ·0
1. 45	33. 20	3. 35	·1124	12. 22	·02083			
2. 27	33. 20		***	15. 12	·02516			
2. 54	31. 0	4. 5	·1110	18. 40	·02507			
3. 11	31. 20		***	22. 12	{ ·02637			
3. 30	30. 40	4. 55	·1101		·02607			
3. 45	28. 50		***	22. 51	·02613			
4. 10	31. 30	6. 20	·1115	23. 59	·02587			
5. 11	25. 30	6. 36	·1108					
5. 22	26. 0	6. 53	·1115					
5. 30	25. 0	7. 13	·1101					
5. 58	28. 20	7. 30	·1130					
6. 12	26. 35	7. 50	·1103					
6. 28	28. 30	8. 4	·1114					
6. 42	27. 35	8. 30	·1106					
6. 55	30. 30	8. 45	·1129					
7. 22	19. 20	9. 35	·1129					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 8		Oct. 8						
h m	° ′ ″	h m		h m		h m		
7. 30	21. 28. 30	9. 40	·1134					
7. 43	29. 30	9. 55	·1127					
7. 54	25. 35		***					
8. 10	27. 55	10. 19	·1127					
8. 39	17. 10	10. 35	·1120					
9. 5	21. 45	10. 55	·1127					
9. 25	24. 50	11. 17	·1122					
9. 52	21 30	11. 45	·1144					
10. 45	23. 45	12. 6	·1119					
11. 25	20. 30	12. 29	·1122					
11. 40	20. 35	12. 55	·1129					
11. 44	22. 5	13. 15	·1129					
12. 45	18. 30		***					
13. 0	14. 30	14. 36	·1141					
13. 15	16. 20	14. 47	·1135					
13. 30	14. 10	15. 0	·1140					
14. 25	18. 50	15. 42	·1136					
14. 56	17. 50	16. 30	·1147					
15. 7	19. 10	16. 55	·1144					
15. 35	18. 25	18. 6	·1153					
16. 28	24. 0	18. 40	·1145					
16. 37	22. 30	19. 0	·1147					
17. 24	30. 0	19. 53	·1136					
17. 42	29. 30	21. 45	·1125					
17. 51	30. 20		***					
18. 25	26. 10	23. 59	·1120					
19. 11	26. 15							
19. 45	25. 10							
19. 57	23. 30							
20. 50	31. 0							
21. 44	31. 50							
22. 11	33. 30							
22. 40	33. 20							
23. 59	37. 20							
Oct. 9		Oct. 9		Oct. 9		Oct. 9		
0. 0	21. 37. 20	0. 0	·1120	0. 0	·02587	1. 0	54·5	54·0
0. 13	37. 0	0. 26	·1122	1. 0	·02467	3. 0	57·0	57·0
0. 29	38. 45	0. 55	·1115	3. 0	{ ·02037	9. 0	59·2	59·3
0. 49	37. 20	1. 25	·1119		·02250	22. 15	55·1	56·3
1. 38	36. 50	2. 14	·1108	4. 10	·01970			
1. 52	37. 20	3. 20	·1122	5. 7	·01916			
2. 45	33. 45	4. 10	·1109	5. 51	·01918			
2. 52	34. 50	4. 50	·1104	8. 10	·01807			
3. 10	34. 20	5. 25	·1106	12. 40	·01727			
3. 22	36. 0	5. 44	·1117	15. 30	·01850			
4. 29	31. 45	6. 15	·1108	22. 12	·02295			
4. 52	26. 0	6. 30	·1118	23. 59	·02322			
5. 3	25. 30	6. 49	·1112					
5. 30	18. 0	7. 15	·1116					
5. 51	23. 35	7. 20	·1124					
5. 56	23. 25	7. 45	·1118					
6. 10	25. 20	8. 30	·1116					
6. 25	24. 5	9. 0	·1118					
6. 45	27. 25	9. 10	·1128					
7. 15	24. 10	9. 30	·1118					
7. 30	26. 0		***					
8. 0	21. 50	11. 16	·1131					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 9		Oct. 9						
h m	° ′ ″	h m		h			°	
8. 39	21. 22. 30	11. 25	·1137					
9. 4	21. 40	11. 45	·1129					
9. 22	23. 50	11. 58	·1137					
9. 27	22. 10	12. 15	·1127					
	***	12. 51	·1141					
10. 13	22. 30	13. 25	·1131					
10. 41	24. 10	14. 0	·1128					
10. 52	21. 45		***					
11. 8	22. 30	15. 0	·1137					
11. 21	17. 10		***					
11. 26	18. 0	15. 45	·1127					
11. 39	15. 20	16. 10	·1130					
11. 51	24. 50	16. 27	·1128					
13. 14	12. 50	17. 6	·1140					
14. 15	26. 0	18. 15	·1115					
14. 40	27. 5		***					
15. 10	21. 10	19. 35	·1125					
15. 35	24. 20	21. 6	·1106					
15. 44	24. 0	22. 55	·1102					
15. 53	25. 0	23. 20	·1100					
16. 30	29. 10	23. 40	·1107					
16. 51	27. 55	23. 59	·1105					
17. 15	26. 30							
17. 40	27. 30							
17. 54	27. 10							
18. 10	39. 10							
18. 32	28. 20							
	***							
19. 44	22. 0							
20. 44	20. 25							
20. 53	21. 20							
21. 7	21. 10							
21. 54	24. 30							
22. 11	27. 30							
22. 29	27. 50							
22. 43	29. 55							
23. 21	30. 30							
23. 52	33. 40							
23. 59	33. 0							
Oct. 10		Oct. 10		Oct. 10		Oct. 10		
0. 0	21. 33. 0	0. 0	·1105	0. 0	·02322	7. 0	57·0	57·5
0. 43	33. 30	0. 55	·1108	1. 0	·02307	21. 0	55·0	56·0
1. 39	32. 10	3. 10	·1127	4. 12	·02145			
1. 51	32. 40		***	8. 0	·02036			
3. 30	30. 30	7. 4	·1129	11. 11	·01890			
4. 52	27. 40	7. 25	·1132	16. 52	·01876			
5. 50	26. 40	8. 15	·1127	23. 59	·02250			
6. 44	27. 0	9. 3	·1133					
7. 43	25. 55	9. 15	·1129					
8. 27	26. 30	9. 40	·1130					
8. 55	24. 10	9. 57	·1125					
9. 11	26. 50	10. 29	·1131					
9. 29	24. 0	10. 38	·1125					
9. 43	24. 0		***					
10. 11	18. 0	11. 25	·1125					
10. 30	21. 0	12. 44	·1128					
10. 44	20. 55	13. 35	·1135					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 10		Oct. 10						
h m	° ′ ″	h m		h m		h m	°	
11. 0	21. 20. 0	14. 7	·1129					
12. 10	24. 30	14. 53	·1135					
12. 42	23. 20	15. 30	·1130					
13. 7	26. 10	16. 30	·1141					
13. 39	24. 35	17. 41	·1141					
14. 11	26. 10	20. 20	·1126					
14. 28	27. 50	21. 25	·1104					
14. 40	27. 50		***					
15. 15	29. 40	23. 59	·1111					
15. 40	28. 20							
15. 51	28. 50							
16. 52	24. 50							
19. 27	23. 0							
20. 10	21. 30							
21. 10	23. 40							
21. 27	23. 30							
21. 43	24. 30							
22. 39	31. 30							
23. 21	33. 40							
23. 45	36. 10							
23. 59	35. 55							
Oct. 11		Oct. 11		Oct. 11		Oct. 11		
0. 0	21. 35. 55	0. 0	·1111	0. 0	·02250	1. 0	56·5	57·0
0. 22	35. 30	0. 25	·1110	1. 30	·02191	3. 0	58·0	59·0
0. 45	33. 45	0. 47	·1104	4. 21	·01784	9. 0	57·3	58·8
1. 11	36. 0	1. 30	·1110	7. 42	·01733	21. 0	48·0	51·0
1. 54	33. 40	2. 0:	·1108	11. 22:	·01954			
2. 39	33. 50	2. 40	·1112	16. 12	·02736			
3. 32	30. 45	3. 45	·1110	21. 11	{ ·02650			
5. 41	26. 30	5. 41	·1117		·02115			
15. 52	27. 10	6. 15	·1125	23. 0	·02186			
18. 26	26. 15	11. 15	·1134	23. 59	·02153			
20. 15	22. 30	15. 0	·1134					
22. 19	30. 30	17. 45:	·1142					
23. 59	33. 45	21. 45	·1120					
		23. 59	·1115					
Oct. 12		Oct. 12		Oct. 12		Oct. 12		
0. 0	21. 33. 45	0. 0	·1115	0. 0	·02153	1. 0	52·0	53·0
0. 29	35. 30	0. 51	·1122	2. 27	·01744	3. 0	57·0	57·0
3. 22	30. 50	1. 55	·1116	3. 11	{ ·01730	9. 0	58·8	58·8
4. 27	28. 0	4. 0	·1121		·01812	21. 0	57·0	58·0
4. 31	30. 20	5. 5	·1126	6. 25	·01691			
4. 42	28. 20	6. 30	·1116	10. 40	·01653			
5. 22	27. 30	6. 48	·1125	18. 9:	·01754			
6. 4	27. 40		***	21. 43	{ ·01650			
6. 44	24. 0	8. 8	·1126		·01713			
6. 53	24. 0	8. 25	·1131	22. 50	{ ·01686			
7. 15	19. 30	8. 58	·1122		·02136			
7. 45	26. 10		***	23. 59	·02012			
8. 15	26. 35	12. 0	·1127					
8. 50	20. 0	12. 15	·1121					
9. 22	24. 30	13. 0	·1131					
11. 51	24. 30	13. 30	·1126					
12. 12	25. 55	17. 53:	·1137					
12. 26	23. 30	21. 0:	·1120					
12. 52	23. 45		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 12		Oct. 12						
h m	° ′ ″	h m		h m		h m	°	°
13. 4	21. 22. 25	22. 55	·1117					
14. 18	26. 30	23. 30	·1108					
17. 21	25. 50	23. 59	·1112					
20. 15	22. 10							
20. 58	22. 35							
22. 57	30. 45							
23. 46	32. 30							
23. 59	34. 0							
Oct. 13		Oct. 13		Oct. 13		Oct. 13		
0. 0	21. 34. 5	0. 0	·1113	0. 0	·02012	1. 0	60·0	61·0
1. 36	36. 35	0. 40	·1104	1. 13	·01987	3. 0	62·5	63·0
2. 2	35. 55	1. 0	·1105	2. 51	{ ·01930	9. 0	64·5	65·0
2. 14	36. 30	2. 21	·1119		·02063	21. 0	61·0	62·5
3. 7	33. 15	3. 10	·1113	5. 1	{ ·01950			
3. 16	33. 45	3. 39	·1096		·02292			
3. 55	28. 20	4. 10	·1109	7. 0	·02117			
4. 22	28. 20	4. 44	·1107	7. 16	·02157			
4. 45	27. 0	5. 20	·1117	9. 43	·02066			
6. 13	27. 20	5. 38	·1116	12. 11	·02060			
6. 54	24. 30	6. 8	·1120	13. 52	·02137			
7. 26	25. 30	6. 40	·1116	20. 7	·02600			
8. 42	24. 20	7. 35	·1125	21. 7	{ ·02616			
10. 10	25. 30	8. 0	·1116		·02568			
10. 41	17. 45	8. 30	·1121	22. 12	{ ·02544			
10. 57	20. 30	8. 49	·1118		·02197			
11. 14	18. 30	9. 0	·1122	23. 59	·02066			
11. 39	24. 10	9. 20	·1117					
12. 45	21. 50	9. 45	·1120					
13. 38	19. 30	10. 18	·1117					
13. 52	20. 30	10. 42	·1138					
14. 40	21. 20	11. 6	·1123					
15. 14	24. 30	11. 25	·1131					
15. 55	22. 45	12. 15	·1118					
	***	12. 55	·1122					
17. 29	21. 30	13. 45	·1114					
18. 15	24. 30	14. 32	·1117					
20. 20	21. 50	15. 10	·1112					
21. 0	22. 25	16. 20:	·1123					
23. 40	31. 30	17. 42	·1125					
23. 59	32. 0	18. 15	·1117					
		19. 10	·1121					
		22. 0	·1106					
		23. 25	·1096					
		23. 59	·1098					
Oct. 14		Oct. 14		Oct. 14		Oct. 14		
0. 0	21. 32. 0	0. 0	·1098	0. 0	·02066	1. 0	63·0	64·0
0. 35	31. 45	0. 40	·1103	2. 11	·01863	3. 0	65·0	65·0
2. 30	29. 55	1. 8	·1098	3. 12	{ ·01837	9. 0	65·0	65·0
3. 13	27. 50		***		·01986	21. 0	61·0	62·0
4. 21	26. 45	2. 30	·1105	5. 13	·01836			
7. 26	26. 30	4. 8	·1106	10. 7:	·01833			
10. 22	25. 20	9. 30	·1116	21. 15:	·02333			
14. 11	26. 0	13. 10	·1117	23. 59	·02306			
18. 25	24. 20	18. 30:	·1124					
20. 45:	20. 45	22. 2	·1098					
22. 12	25. 35	22. 20	·1100					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 14		Oct. 14						
h m	° ′ ″	h m		h m		h m	°	°
22.28	21.25.35	22.55	·1097					
23.59	32.30	23.15	·1092					
		23.59	·1098					
Oct. 15		Oct. 15		Oct. 15		Oct. 15		
0. 0	21.32.30	0. 0	·1098	0. 0	·02306	1. 0	63·0	64·0
0.14	32.30	0.44	·1101	4. 5	·01826	3. 0	65·0	66·0
0.44	34. 0	1. 0	·1098		·01886	9. 0	65·0	66·0
0.59	32.45	2.45	·1107	7.24	·01807	21. 0	57·0	59·0
2.28	31.30	3.20	·1101	10.21:	·01873			
2.41	31.45	7.15	·1117	16.40	·02686			
3.21	29.10		***	21.44	·02650			
6.13	26.20	12.15	·1124		·02393			
7.22	26.30	12.25	·1120	23.59	·02397			
8.29	25.45	14. 6	·1121					
9.22	26.20	15.45	·1129					
12.50	26.30	18.10	·1130					
13.52	25.30	21.20	·1116					
14.56	25.30	22.20	·1114					
15.22	26.40	23.59	·1099					
16.14	25. 0							
18.28	25.30							
20.45:	21.35							
21.32	23.20							
23.15	30.45							
23.45	32.55							
23.59	32.45							
Oct. 16		Oct. 16		Oct. 16		Oct. 16		
0. 0	21.32.45	0. 0	·1099	0. 0	·02397	1. 0	60·0	61·5
0.10	32.30		***	1.12	·02277	3. 0	64·0	65·0
0.30	33.30	4.10	·1100	2.43	·01924	9. 0	66·8	66·5
0.51	32.30	4.30	·1096	4.40	·01837	22. 0	61·0	62·0
2.30	30.50	6.14	·1098	9.16	·01756			
3.52	28.20		***		·01963			
4.14	28.30	10. 7	·1111	12.37	·02033			
4.39	27.30	10.12	·1120	15.11	·02196			
5.30	27.30	10.18	·1112	21.28:	·02717			
5.59	24.50	10.26	·1119	23.59	·02686			
6.20	26. 0	10.31	·1108					
7. 5	26.10	10.55	·1105					
7.28	23.20	11.10	·1110					
8.21	26. 0	11.45	·1106					
10.25	26.40	11.55	·1119					
11. 6	25.30	12.10	·1121					
11.58	24.40		***					
12.45	18.30	13.36	·1099					
13.13	20.30	13.51	·1105					
13.29	18.30		***					
13.56	20.55	15.38	·1106					
14.27	21.10	16.30	·1114					
15. 6	25.10		***					
15.29	23.55	17.48	·1118					
15.44	25. 0	18.15	·1109					
16. 0	24.30	19. 0:	·1112					
16.31	26. 0	20.40	·1091					
17.21	25.50	23.59	·1099					
17.31	24.20							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 16								
h m	° ′ ″	h m		h m		h m	°	°
18.10	21.24.55							
18.13	26. 0							
18.30	25. 0							
18.39	25. 0							
20. 3	20.40							
21. 0	20.40							
23.59	32.15							
Oct. 17		Oct. 17		Oct. 17		Oct. 17		
0. 0	21.32.15	0. 0	·1099	0. 0	·02686	8.47	61·0	62·2
0.13	32. 5		***	2.12:	·02637	21. 0	55·0	57·0
0.40	33.15	3.43	·1108	6.15	·02396			
2. 1	31.50		***	7.57	·02355			
2.15	31.40	5.40	·1106	8.21	·02396			
3.28	29.15	5.55	·1117	8.44	·02347			
4.52	27.30	6.15	·1110	9.45	·02386			
7.27	26.15	7. 0	·1110	11.14	·02542			
7.40	21.27.50	7. 7	·1100	11.50	·02507			
7.58	20.57.35	7.10	·1124	12.40	·02638			
8.16	21. 4.45	7.34	·1111	13. 0	·02625			
8.40	20.57.40		***	17.13	·02687			
8.47	21. 0.55	8.10	·1145		·02618			
8.51	0. 5	9. 0	·1094	21.14	·02620			
9.40	8.35	9.17	·1097		·02366			
9.52	11.10	9.45	·1082	23.59	·02466			
	(†)	10.15	·1091					
11.41	15.10		***					
12. 0	5.45	11.12	·1090					
12.30	13.40	11.30	·1112					
12.45	15.55	11.45	·1103					
12.53	11.50	11.55	·1117					
13. 2	12. 0		***					
13.20	16.35	12.30	·1113					
13.59	21. 0	13. 0	·1100					
14.21	21.20	13.22	·1101					
14.42	23.25	13.45	·1108					
15.22	24.45	14.20	·1104					
15.42	24.10	16.30	·1118					
16.44	25.30		***					
17.15	24.10	19.10	·1127					
19. 4	23.20		***					
20.29	21.10	23.59	·1130					
20.37	21.45							
21.30	21.20							
23.42	30.20							
23.59	32.10							
Oct. 18		Oct. 18		Oct. 18		Oct. 18		
0. 0	21.32.10	0. 0	·1130	0. 0	·02466	1. 0	56·0	57·0
0.55	32.30	1. 0	·1132	2.45	·02463	3. 0	57·0	58·0
3.10	26.30	2. 5	·1103	7.42:	·02210	9. 0	56·7	58·0
3.27	26.40	2.40	·1111	11. 0	·02222	21. 0	56·4	58·0
3.54	25.30	3.11	·1105	12.51	·02165			
4.10	25.20	3.34	·1112	13.21	·02193			
4.51	23.40	4.15	·1114	13.43	·02156			
5.30	25.30	4.50	·1110	14.52	·02197			
6.54	25.45	5.45	·1118	19.43	·02237			
9. 0	26.50		***	23.59	·02154			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 18		Oct. 18						
h m	° ′ ″	h m		h m		h m	°	°
9. 14	21. 25. 40	7. 15	·1126					
9. 23	26. 40	7. 30	·1132					
9. 53	24. 35		***					
10. 0	24. 55	8. 25	·1122					
10. 11	30. 50	8. 43	·1126					
10. 31	24. 50	9. 5	·1125					
10. 50	17. 30	9. 15	·1131					
10. 59	19. 0	9. 40	·1120					
11. 37	9. 30	9. 55	·1130					
11. 55	7. 30	10. 15	·1109					
12. 38	15. 10	10. 29	·1106					
12. 49	15. 15	10. 51	·1129					
13. 0	18. 30		***					
13. 14	24. 20	12. 7	·1100					
13. 40	14. 15	12. 24	·1101					
14. 10	21. 55	12. 43	·1096					
14. 21	19. 30	13. 15	·1121					
14. 32	18. 20	13. 28	·1119					
14. 45	20. 30	13. 44	·1127					
14. 58	19. 45	13. 59	·1127					
15. 14	20. 50	14. 15	·1108					
15. 45	18. 5	14. 38	·1120					
16. 12	18. 55	15. 20	·1116					
16. 33	22. 30	16. 27	·1125					
16. 58	24. 30	16. 45	·1118					
	***	17. 45	·1121					
17. 58	23. 40	18. 30	·1107					
18. 30	27. 10	18. 50	·1120					
18. 43	26. 20	19. 10	·1110					
18. 46	27. 10	19. 25	·1115					
19. 5	27. 5		***					
19. 14	24. 55	20. 35	·1093					
19. 46	28. 40	20. 52	·1100					
19. 52	27. 30		***					
20. 9	31. 0	22. 55	·1110					
20. 19	31. 0	23. 16	·1100					
20. 30	29. 30	23. 35	·1104					
20. 44	32. 30	23. 59	·1106					
21. 7	30. 0							
21. 22	30. 30							
21. 57	25. 50							
	***							
22. 14	26. 30							
22. 25	24. 35							
22. 51	29. 0							
	***							
23. 16	28. 35							
23. 30	31. 50							
23. 59	31. 30							
Oct. 19		Oct. 19		Oct. 19		Oct. 19		
0. 0	21. 31. 30	0. 0	·1106	0. 0	·02154	1. 0	58 ·0	59 ·0
0. 14	26. 45	0. 10	·1098	2. 51	·01955	3. 0	60 ·0	60 ·2
0. 51	30. 10	2. 10	·1099	4. 56	·01730	9. 0	61 ·0	61 ·5
1. 26	29. 20	2. 21	·1095		***	21. 0	59 ·9	61 ·2
1. 39	30. 10	2. 44	·1095	8. 22	·01728			
1. 56	30. 20	3. 2	·1103		***			
2. 14	31. 30		***	11. 3	·01588			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 19		Oct. 19		Oct. 19				
h m	° ′ ″	h m		h m		h m	°	°
2. 49	21. 26. 20	5. 15	·1110	15. 0	·01664			
3. 15	24. 40	5. 39	·1099	22. 39	{ ·01637			
3. 51 ;	26. 25	6. 6	·1101		·01685			
4. 34	23. 0	6. 28	·1094	23. 59	·01668			
5. 27	24. 40	6. 40	·1102					
5. 35	26. 40	7. 5	·1083					
5. 44	24. 30	7. 10	·1090					
5. 55	27. 30		***					
6. 10	27. 20	8. 35	·1089					
6. 19	25. 0	8. 55	·1082					
6. 40	20. 0	9. 11	·1082					
6. 53	25. 15	9. 35	·1076					
6. 57	24. 20	9. 45	·1083					
7. 0	26. 0	9. 57	·1079					
7. 12	19. 20	10. 25	·1088					
7. 16	21. 15	11. 0	·1071					
7. 29	18. 30	11. 30	·1111					
8. 1	11. 30	11. 46	·1104					
8. 19	16. 15		***					
9. 15	11. 30	13. 52	·1110					
9. 28	9. 0	15. 45	·1120					
9. 30	9. 15	16. 24	·1116					
9. 44	7. 20	17. 15	·1115					
9. 58	8. 20	17. 55	·1118					
10. 12	6. 20		***					
10. 18	7. 30	21. 0	·1097					
10. 22	7. 15	23. 0	·1086					
10. 29	7. 55	23. 59	·1084					
10. 44	5. 30							
10. 53	8. 30							
11. 10	7. 0							
11. 48	16. 45							
12. 4	13. 55							
12. 39	19. 20							
12. 48	19. 15							
12. 56	20. 30							
13. 27	19. 45							
13. 39	21. 20							
14. 4	21. 20							
14. 15	21. 55							
14. 36	21. 20							
15. 14	21. 50							
15. 29	24. 40							
16. 43	20. 50							
17. 43	20. 40							
18. 29	19. 10							
18. 52	19. 35							
19. 7	18. 30							
20. 30	17. 20							
	***							
21. 52	18. 40							
	***							
23. 45	26. 20							
23. 59	26. 15							
Oct. 20		Oct. 20		Oct. 20		Oct. 20		
0. 0	21. 26. 15	0. 0	·1084	0. 0	·01668	1. 0	61 ·0	62 ·2
1. 28	28. 20	0. 35	·1085	2. 58	{ ·01770	3. 0	62 ·0	63 ·2
2. 15	27. 0	1. 15	·1094		·01857	9. 0	63 ·0	64 ·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 20		Oct. 20		Oct. 20		Oct. 20		
h m	° ′	h m		h m		h m	°	°
2. 21	21. 28. 10	2. 10	·1092	4. 0	·01807	21. 0	56·0	58·0
2. 36	28. 10	2. 21	·1098		·01675			
2. 51	27. 10	3. 0	·1099	6. 22	·01830			
3. 10	27. 45	3. 25	·1092	8. 58	·01784			
3. 21	25. 45	3. 45	·1094	11. 15	·01812			
3. 57	26. 0		***	14. 39	·02050			
5. 14	22. 20	5. 40	·1100	16. 10	·02654			
5. 30	22. 45	6. 4	·1106	23. 59	·02647			
5. 51	22. 10		***					
6. 51	21. 45	8. 14	·1104					
7. 26	22. 30	8. 28	·1134					
8. 15	20. 20	8. 55	·1107					
8. 30	12. 0	9. 24	·1102					
8. 36	14. 20		***					
8. 45	15. 15	10. 41	·1105					
9. 5	12. 30		***					
9. 38	15. 35	11. 55	·1114					
9. 50	16. 10	12. 30	·1112					
9. 54	15. 30	12. 42	·1105					
10. 45	17. 5	13. 55	·1115					
11. 0	16. 20	14. 10	·1112					
11. 15	17. 30	14. 36	·1120					
12. 28	18. 55	15. 21	·1114					
12. 50	18. 0	16. 30	·1121					
13. 10	20. 55	18. 50	·1119					
13. 40	21. 30	19. 16	·1128					
14. 1	28. 20	21. 40	·1100					
14. 44	22. 20	22. 42	·1102					
15. 14	21. 0	23. 0	·1095					
15. 29	21. 55	23. 20	·1099					
16. 10	20. 50	23. 35	·1093					
18. 37	22. 30	23. 59	·1092					
18. 55	21. 20							
20. 29	18. 5							
21. 7	19. 30							
21. 42	17. 30							
23. 11	29. 40							
23. 30	32. 30							
23. 44	31. 55							
23. 59	32. 40							
Oct. 21		Oct. 21		Oct. 21		Oct. 21		
0. 0	21. 32. 40	0. 0	·1092	0. 0	·02647	1. 0	57·3	60·8
0. 17	34. 0	0. 9	·1093	2. 20	·02396	3. 0	60·0	61·8
0. 25	33. 10	0. 15	·1084	6. 25	·01750	9. 0	62·0	63·0
0. 42	35. 55	0. 42	·1083		·01807	21. 0	57·4	59·2
0. 49	34. 30	1. 8	·1089	11. 42	·01717			
1. 45	35. 30		***	12. 15	·01684			
2. 22:	33. 20	1. 55	·1085	13. 12	·01714			
2. 40	34. 30	3. 35	·1092	14. 43	·01666			
3. 11	32. 30	4. 15	·1089	18. 3	·01876			
3. 36	32. 45	4. 44	·1094	20. 22	·02117			
4. 15	28. 30		***	23. 59	·02293			
4. 47	27. 50	6. 7	·1091					
	***	7. 10	·1102					
5. 24	28. 10	7. 40	·1106					
6. 7	26. 50		***					
6. 42:	24. 30	8. 59	·1104					
7. 0	25. 0	9. 10	·1098					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 21		Oct. 21						
h m	° ′	h m						
7. 45	21. 23. 30	9. 30	·1113					
8. 26	24. 0		***					
9. 0	22. 50	10. 58	·1099					
9. 22	14. 5	11. 30	·1117					
9. 45	21. 30	11. 54	·1108					
	***		***					
10. 25	19. 30	12. 53	·1105					
10. 45	17. 20	13. 47	·1126					
11. 22	19. 30	14. 45	·1125					
11. 52	14. 30	15. 24	·1113					
12. 40	25. 30	15. 48	·1109					
12. 59	26. 45	16. 43	·1114					
13. 12	26. 30	17. 15	·1115					
13. 39	31. 45	17. 45	·1129					
14. 40	17. 30		***					
15. 4	16. 55	18. 50	·1121					
15. 50	22. 30		***					
16. 36	24. 50	19. 30	·1124					
16. 45	26. 5		***					
17. 28	35. 20	19. 55	·1118					
17. 43	34. 45		***					
18. 30	25. 30	20. 41	·1126					
19. 15	23. 15		***					
	***	22. 15	·1103					
19. 48	24. 0	22. 25	·1107					
20. 12	21. 50	23. 57	·1094					
	***							
20. 55	23. 25							
22. 10	25. 30							
22. 15	25. 5							
22. 25	28. 30							
23. 0	32. 10							
23. 15	33. 0							
23. 46	32. 30							
23. 58	33. 45							
	(†)							
Oct. 22		Oct. 22		Oct. 22		Oct. 22		
	(†)	0. 0	·1092	0. 0	·02293	1. 0	59·0	61·0
0. 10	21. 32. 20	0. 24	·1086	1. 13:	·02257	3. 0	61·8	63·0
	***		***	4. 43	·01758	9. 0	61·7	63·0
0. 45	33. 15	1. 6	·1089		·01808	21. 0	55·0	57·0
1. 10	33. 55	1. 50	·1108	10. 11:	·01773			
1. 30	34. 30	2. 5	·1102	20. 0	·02682			
1. 45	34. 30	2. 25	·1104	23. 59	·02683			
1. 53	33. 0	2. 35	·1101					
3. 0	31. 25	3. 3	·1105					
5. 10	26. 20	3. 15	·1100					
6. 10	24. 55	4. 53	·1100					
6. 15	25. 30	6. 30	·1104					
6. 52	25. 0	7. 15	·1112					
7. 43	25. 30	7. 55	·1105					
8. 12	23. 30	8. 20	·1110					
8. 30	22. 55	13. 12	·1117					
9. 15	23. 30	17. 0	·1128					
16. 22	26. 0	19. 40:	·1125					
17. 55	24. 30							
18. 54	25. 30	22. 47	[illegible]					
19. 43	22. 35	23. 59	[illegible]					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 22								
h m	° ′ ″	h m		h m		h m	°	°
20. 7	21. 22. 30							
20. 25	20. 30							
20. 36	21. 30							
21. 11	21. 10							
21. 48	23. 30							
22. 0	25. 35							
22. 15	25. 55							
22. 41	28. 30							
23. 40	30. 30							
23. 59	34. 50							
Oct. 23		Oct. 23		Oct. 23		Oct. 23		
0. 0	21. 34. 50	0. 0	·1103	0. 0	·02683	1. 0	57·2	58·5
0. 40	32. 30	0. 15	·1109	2. 0	·02484	3. 0	60·0	61·0
0. 46	33. 0	0. 44	·1101	6. 50	{ ·01746	9. 0	60·7	62·0
0. 55	32. 0	0. 57	·1106		·01795	22. 0	58·0	59·5
2. 5	33. 35	1. 40	·1109	13. 37	·01707			
2. 40	32. 55	2. 46	·1105	18. 12	·01846			
3. 15	31. 5	3. 3	·1101	20. 25	·01947			
3. 30	31. 30	3. 25	·1108	23. 59	·02056			
3. 52	29. 10	3. 46	·1105					
5. 51	26. 30	4. 40	·1113					
6. 43	26. 25		***					
7. 6	25. 10	5. 45	·1117					
7. 13	25. 55	6. 15	·1111					
7. 51	15. 30	6. 27	·1114					
8. 11	17. 30	7. 11	·1102					
8. 17	17. 15	8. 0	·1117					
8. 43	21. 20	8. 10	·1111					
9. 25	15. 30	8. 40	·1111					
9. 43	20. 20	8. 54	·1124					
9. 54	19. 10	9. 25	·1120					
10. 50	21. 45	9. 44	·1108					
10. 59	21. 20	10. 10	·1113					
11. 29	24. 5		***					
11. 56	21. 15	10. 44	·1107					
12. 14	20. 30	11. 23	·1119					
12. 29	22. 20	11. 44	·1112					
12. 50	21. 15	11. 58	·1115					
13. 15	25. 40	12. 35	·1111					
13. 36	23. 30	13. 15	·1121					
13. 52	26. 20	13. 56	·1104					
14. 1	25. 55	14. 27	·1113					
14. 19	27. 30		***					
14. 39	26. 20	17. 10	·1128					
14. 59	27. 25	18. 10	·1118					
16. 10	25. 35	19. 25	·1119					
16. 44	26. 30	20. 25	·1104					
17. 0	23. 30	21. 53	·1097					
17. 21	23. 20	23. 59	·1103					
	***							
18. 12	25. 45							
20. 10	21. 30							
20. 22	19. 50							
21. 40	23. 10							
23. 22	31. 40							
23. 59	33. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 24		Oct. 2		Oct. 24		Oct. 24		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 33. 0	0. 0	·1103	0. 0	·02056	8. 15	58·5	58·5
1. 36	33. 5		***	3. 0	·02065	21. 0	56·9	58·0
4. 11	28. 0	5. 0	·1126	11. 11	·02056			
7. 29	26. 45	8. 30	·1127	12. 0	·02018			
7. 51	25. 5	8. 48	·1133	21. 0	·02210			
8. 52	25. 50	9. 55	·1124	23. 59	·02190			
9. 29	22. 30	10. 20	·1128					
9. 54	22. 30	10. 48	·1120					
10. 22	20. 20	11. 5	·1141					
10. 58	21. 10	11. 30	·1125					
11. 22	31. 0	12. 2	·1127					
11. 51	24. 30	13. 2	·1121					
12. 11	22. 45		***					
13. 14	26. 30	17. 0:	·1128					
13. 55	25. 40		***					
14. 7	26. 30	21. 0	·1109					
14. 52	25. 35	23. 59	·1101					
15. 4	26. 30							
15. 22	26. 5							
15. 59	26. 30							
16. 52	26. 20							
17. 43	27. 20							
17. 58	26. 0							
18. 10	26. 35							
18. 24	25. 15							
	***							
21. 0	20. 30							
	***							
23. 59	30. 30							
Oct. 25		Oct. 25		Oct. 25		Oct. 25		
0. 0	21. 30. 30	0. 0	·1100	0. 0	·02190	1. 0	58·8	59·6
0. 40	30. 30	0. 35	·1095	4. 22	{ ·01747	3. 0	60·0	61·0
0. 46	31. 35	2. 50	·1112		·01796	9. 0	59·0	60·2
1. 18	31. 50	3. 13	·1109	8. 25	·01723	21. 0	54·8	55·5
3. 0	28. 30	3. 51	·1114	10. 52	·01808			
3. 32	26. 30	4. 10	·1109	19. 30:	·02484			
4. 51	23. 30	5. 10	·1119	22. 43	·02570			
5. 22	24. 30	6. 53	·1120	23. 59	·02498			
8. 0	24. 35	7. 30	·1128					
	***	8. 8	·1124					
9. 45	21. 35	9. 30	·1126					
9. 53	22. 30		***					
10. 10	22. 50	10. 10	·1127					
10. 22	19. 50	10. 30	·1149					
11. 10	23. 30		***					
11. 26	23. 35	10. 45	·1132					
11. 43	24. 45	18. 15	·1140					
13. 12	26. 0	21. 25	·1125					
17. 2	25. 0	23. 30	·1110					
17. 26	24. 20	23. 59	·1113					
18. 10	24. 30							
20. 7	22. 0							
20. 44	21. 55							
21. 36	23. 30							
23. 5	31. 55							
23. 59	32. 30							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

October 25d. 9h. After this hour the times both of the Declination and Horizontal Force are probably subject to an increasing error, not exceeding half an hour at the end of the day.

Greenwich Mean Solar Time.	Western Declination.
Oct. 26	
h m	° ′ ″
0. 0	21. 32. 30
1. 6	32. 35
1. 39	31. 40
1. 59	31. 40
3. 12	28. 30
4. 13	27. 45
4. 30	28. 40
4. 57	27. 30
5. 29	19. 30
5. 42	19. 0
5. 48	19. 30
6. 13	24. 45
6. 26	24. 20
6. 36	26. 20
7. 7	23. 35
7. 19	23. 40
8. 0	20. 40
8. 15	21. 55
8. 51	22. 25
9. 12	20. 10
9. 35	21. 30
9. 50	21. 20
10. 6	20. 0
10. 43	22. 10
12. 30	26. 45
12. 54	24. 0
13. 40	24. 15
14. 19	28. 15
14. 36	26. 40
14. 51	26. 40
15. 0	28. 20
15. 24	28. 20
15. 36	31. 50
16. 25	21. 50
17. 0	25. 0
17. 15	24. 30
17. 59	26. 10
18. 30	25. 30
18. 44	27. 50
19. 19	26. 30
19. 36	26. 50
20. 32	25. 0
20. 45	26. 10
20. 56	25. 30
21. 39	28. 10
21. 43	27. 50
22. 12	30. 20
22. 22	31. 30
22. 29	31. 15
22. 51	38. 20
23. 17	37. 20
	(†)
Oct. 27	
	(†)
0. 10	21. 36. 10
1. 17	35. 30
1. 52	33. 40

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Oct. 26	
h m	
0. 0	·1111
	***
3. 15	·1114
3. 40	·1120
4. 50	·1114
5. 3	·1106
5. 16	·1107
5. 40	·1122
6. 14	·1110
	***
7. 7	·1121
7. 25	·1115
7. 45	·1114
8. 40	·1126
8. 55	·1120
9. 15	·1126
9. 53	·1125
10. 35	·1133
11. 45	·1135
12. 0	·1140
12. 45	·1137
	***
14. 30	·1138
15. 10	·1142
15. 28	·1137
16. 5	·1161
16. 35	·1155
17. 25	·1159
18. 55	·1145
19. 40	·1142
	***
22. 30	·1110
22. 40	·1118
22. 53	·1117
23. 6	·1104
23. 50	·1099
	(†)
Oct. 27	
	†
0. 10	·1106
0. 45	·1104
	***

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Oct. 26	
h m	
0. 0	·02498
0. 50	·02417 ·02140
2. 59	·01843
6. 15	·01786 ·02104
9. 3	·02090
11. 0	·02184
15. 50	·02583
16. 12	·02572
16. 54	·02622
19. 43	·02654 ·02577
21. 14	·02598 ·02447
22. 43	·02506
23. 59	·02343
Oct. 27	
0. 0	·02343
1. 27	·02211
3. 39	·01864
8. 0	·01756 ·01884

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
Oct. 26		
h m	°	°
1. 0	58·0	58·0
3. 0	60·0	61·0
9. 0	59·0	60·2
21. 0	54·0	56·0
Oct. 27		
1. 0	57·0	58·0
3. 0	60·0	60·0
9. 0	59·0	60·0
21. 0	53·8	55·0

Greenwich Mean Solar Time.	Western Declination.
Oct. 27	
h m	° ′ ″
2. 52	21. 27. 15
3. 53	23. 30
5. 50	21. 10
6. 10	18. 30
6. 25	17. 25
6. 37	15. 30
7. 11	16. 55
7. 30	18. 40
7. 45	17. 40
7. 59	18. 30
8. 11	18. 15
8. 22	19. 30
8. 39	18. 30
9. 10	20. 30
9. 44	20. 30
10. 11	21. 30
10. 27	21. 15
10. 39	22. 0
11. 1	21. 40
11. 29	23. 55
11. 41	29. 30
11. 53	20. 20
12. 11	33. 25
12. 45	19. 10
12. 52	21. 15
13. 16	4. 25
13. 50	28. 30
14. 0	22. 30
14. 18	52. 50
14. 53	13. 5
15. 21	20. 50
15. 36	16. 0
15. 58	24. 30
16. 15	31. 15
16. 31	35. 55
16. 40	34. 45
16. 51	39. 30
17. 12	26. 20
17. 24	28. 15
17. 42	23. 10
17. 45	24. 15
18. 7	22. 30
18. 11	24. 30
18. 18	22. 30
	***
18. 59	23. 0
19. 16	21. 0
19. 29	21. 50
	***
20. 10	21. 30
	***
20. 21	23. 0
20. 32	21. 10
20. 43	21. 20
20. 46	22. 30
20. 58	22. 30
21. 7	21. 30
	***

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Oct. 27	
h m	
1. 55	·1108
2. 10	·1104
4. 15	·1121
5. 15	·1124
6. 15	·1118
6. 40	·1126
7. 10	·1128
7. 30	·1124
8. 19	·1126
	***
10. 0	·1132
10. 25	·1139
10. 54	·1137
11. 3	·1144
11. 23	·1141
11. 25	·1168
11. 30	·1161
11. 42	·1178
11. 48	·1170
12. 6	·1215
12. 40	·1156
12. 58	·1117
13. 20	·1130
13. 30	·1119
13. 40	·1119
13. 54	·1138
14. 14	·1070
14. 30	·1104
14. 39	·1087
14. 47	·1133
14. 58	·1146
15. 4	·1135
15. 28	·1132
15. 40	·1138
16. 0	·1132
16. 8	·1140
16. 18	·1140
16. 35	·1120
16. 50	·1120
17. 0	·1095
17. 25	·1119
17. 45	·1114
	***
18. 55	·1124
	***
20. 0	·1125
	***
21. 24	·1121
	***
22. 28	·1106
22. 44	·1100
23. 7	·1093
23. 59	·1094

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Oct. 27	
h m	
10. 12	[illegible]
	***
12. 19	·02046
	***
13. 0	[illegible]
13. 28	[illegible]
	***
14. 12	·02077
14. 34	·02008
14. 44	[illegible]
15. 6	·01863
15. 14	[illegible]
	***
16. 40	·02284
16. 54	·02284
17. 19	·02330
18. 40	·02607 ·02563
21. 4	·02628 ·02567
23. 59	·02576

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Oct. 27	
h m	° ′ ″
21. 41	21. 22. 30 ***
23. 59	29. 20
Oct. 28	
0. 0	21. 29. 20
0. 54	30. 40
2. 26	27. 30
4. 42	24. 45
5. 19	21. 20
5. 40	21. 15
6. 15	25. 5
11. 32	24. 55
11. 52	24. 0
12. 13	23. 40
	(†)
13. 58	23. 45
14. 43	22. 45
15. 0	23. 50
15. 11	23. 30
15. 28	23. 50
15. 43	25. 0
15. 52	24. 5
16. 10	25. 30
16. 31	24. 0
17. 10	26. 0
17. 54	26. 0
19. 10	23. 55 ***
19. 44	23. 55
19. 57	22. 15 ***
20. 32	23. 30
20. 44	20. 30
20. 57	24. 0
21. 6	22. 30 ***
21. 37	24. 30 ***
22. 13	23. 30
22. 45	28. 40
23. 15	29. 20
	(†)
Oct. 29	
	(†)
0. 10	21. 30. 35
0. 28	29. 10
0. 45	31. 55
1. 40	33. 30
3. 30	29. 20
3. 40	30. 50
4. 5	27. 0
4. 11	27. 0
4. 39	24. 30
4. 56	25. 30
5. 11	24. 10
5. 40	22. 30
5. 54	21. 20. 0
6. 22	10 20
6. 58	21. 0
7. 12	22. 40
7. 30	21. 30
7. 56	22. 50
8. 29	21. 45
8. 47	18. 40
8. 54	20. 10
9. 0	19. 30
9. 12	21. 10
9. 43	13. 30
10. 0	18. 30 ***
10. 59	19. 0
11. 15	19. 50
11. 30	19. 15
12. 22	22. 45
12. 37	22. 40
12. 55	26. 20
	(†)
13. 44	23. 0
13. 49	22. 30
13. 52	23. 10
14. 4	21. 45
14. 14	23. 0
14. 40	21. 0
14. 57	21. 30
15. 5	23. 0
15. 14	23. 40
15. 22	22. 30
15. 43	26. 30
15. 48	26. 10
15. 58	27. 0
16. 21	27. 5
16. 52	33. 15
17. 10	32. 30
17. 20	34. 50
17. 39	29. 35
17. 52	28. 30
18. 4	31. 45
18. 11	31. 0
18. 15	32. 0
18. 28	30. 0
18. 40	31. 30
18. 52	30. 50
19. 15	25. 10
19. 22	26. 55
19. 28	26. 10
19. 31	27. 10
19. 46	24. 30
19. 58	27. 0
20. 7	25. 5
20. 12	26. 40
20. 22	25. 20
20. 28	27. 0
20. 52	24. 0 ***

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
Oct. 28	
0. 0	·1095
0. 52	·1104 ***
2. 16	·1104
3. 0	·1114
4. 40	·1114
5. 10	·1110
5. 55	·1125
6. 24	·1122
7. 5	·1126
10. 40	·1127 ***
11. 58	·1130
12. 27	·1127
12. 40	·1131
13. 0	·1127
13. 55	·1136
14. 30	·1130
15. 25	·1128
15. 45	·1133
17. 0	·1134
18. 0	·1144
18. 30	·1142
19. 15	·1145 ***
20. 39	·1121 ***
21. 45	·1131
22. 15	·1123
22. 30	·1127
23. 24	·1117
23. 59	·1112
Oct. 29	
0. 0	·1112
0. 53	·1089
1. 35	·1113 ***
3. 40	·1115
5. 0	·1124
5. 25	·1112
5. 55	·1134
6. 5	·1127
6. 25	·1131
6. 40	·1125
7. 15	·1128
8. 0	·1140
8. 45	·1112
9. 6	·1131 ***
10. 0	·1131 ***
11. 55	·1142
12. 30	·1153
12. 40	·1147
12. 50	·1153
13. 0	·1144
13. 3	·1152
13. 45	·1146
13. 51	·1152
14. 0	·1142
14. 12	·1147
14. 21	·1142
14. 55	·1151
15. 55	·1143
16. 24	·1148
16. 35	·1147
16. 54	·1131
17. 15	·1151
17. 40	·1163
18. 5	·1137 ***
18. 55	·1155 ***
20. 30	·1134 ***
21. 4	·1137 ***
21. 40	·1136 ***
22. 25	·1113
22. 40	·1113
22. 55	·1128
23. 10	·1118
23. 30	·1126
23. 52	·1123 (†)

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Oct. 28	
0. 0	·02576
2. 45	·02354
8. 3:	·01755
12. 52	·01872
13. 13	·01868
18. 30	{ ·02576 ·02538
23. 59	·02633
Oct. 29	
0. 0	·02633
1. 12	·02615
5. 14:	·02084
8. 45	·01852
13. 24	·01892
17. 52	·02163
20. 43	{ ·02530 ·02472
22. 40	{ ·02533 ·02456
23. 59	·02475

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Oct. 28		
1. 0	56·0	57·0
3. 0	58·0	59·0
9. 0	58·0	58·5
21. 0	48·0	51·0
Oct. 29		
1. 0	51·0	52·5
3. 0	53·0	54·3
9. 0	52·8	54·0
21. 0	46·8	49·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
Oct. 29	
h. m.	° ′ ″
21.22	21.25.50
21.29	24.10
21.44	28.50
21.55	27.55
22. 0	29. 0
22.10	29.40
22.26	26.30
23. 0	31.20
23.30	31.50
	(†)
Oct. 30	
3. 0	21.35.35*
9. 0	29.25*
22.22	33.55*
Oct. 31	
0. 0	21.38. 0
1.17	39.30
1.30	42.30
2.15	39.30
4.22	33.50
6.10	33.30
7.10	39.20
7.45	6.15
8.10	30. 0
8.13	28.20
8.15	29.15
8.24	26.30
8.30	28.15
8.52	13.30
9. 5	24.20
9.30	16.35
9.56	19.30
10.14	19.20
10.36	22.40
10.43	17.50
10.52	30.50
11. 0	29.30
11. 7	32.10
	(†)
11.45	36.15
11.52	33.30
12.12	34. 0
12.25	31.55
12.50	22.35
13.21	28.40
13.45	23.55
13.50	24.40
13.56	24.10
14.32	36.30
14.52	28.30
15. 4	27.50
15.54	33.20
16.13	32.10
16.46	38. 0
Oct. 31	
17.10	21.40.20
17.45	41.10
	***
18.56	32.45
	***
19.36	33.30
	***
20.24	32.30
	***
21.40	32. 0
	***
23. 6	37. 0
	(†)
Nov. 1	
	(†)
0.50	21.37.30
	***
2.40	38.20
2.51	36.15
3. 0	36.30
3.28	33.50
3.53	37.25
4.25	36. 0
4.45	32.50
5.11	33.30
5.36	31.30
5.58	30.40
6.13	31. 0
6.46	28. 0
7. 5	29.10
7.18	28.30
7.30	29.50
	***
8.45	28.20
9.30	20.30
9.51	27.35
9.57	27.30
10. 3	29.30
10.39	19.30
10.52	20.10
11. 0	19. 0
11.40	23.50
12. 0	24.30
12.28	22.30
14.14	26.35
14.48	25. 0
15.14	25.35
15.37	28.50
16.30	32. 0
17.17	29.50
18. 5	30.30
20. 7	28.15
	***
21.30	30.30
21.43	32.30
21.58	31.45
	***
22.44	34.30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h. m.	
Oct. 30	
1. 0	·1111*
3. 0	·1115*
9. 0	·1138*
22.22	·1131*
Oct. 31	
0. 0	·1126
1.10	·1126
1.30:	·1129
2.39	·1121
	***
4.25	·1138
5.54	·1138
6. 0	·1160
6. 6	·1150
6.30	·1147
6.50	·1152
7. 7	·1148
7.30	·1113
7.40	·1120
7.52	·1120
8. 0	·1151
	***
8.26	·1150
8.39	·1134
8.55	·1151
9. 5	·1135
9.16	·1126
9.45	·1113
10.24	·1117
10.34	·1161
10.45	·1134
11. 2	·1162
11.15	·1167
11.40	·1140
11.55	·1148
	***
12.30	·1128
12.57	·1143
13.15	·1130
13.43	·1140
13.54	·1132
14.15	·1129
14.40	·1138
15.10	·1164
Oct. 31	
15.[illegible]	·1150
16.23	·1162
17.15	·1137
17.39	·1142
18. 0	·1135
	***
19.14	·1148
20. 0	·1146
21.14	·1148
	***
22.30	·1131
23.5[illegible]	·1133
Nov. 1	
0. 0	·1133
	***
1.20	·1126
	***
3.19	·1128
3.45	·1135
3.57	·1128
	***
4.36	·1127
5. 0	·1139
5.14	·1130
	***
6.15	·1134
6.30	·1128
6.55	·1130
7. 9	·1141
7.24	·1149
7.55	·1143
8.32	·1148
9.20	·1144
9.40	·1158
10. 6	·1138
	***
10.44	·1150
11. 0	·1138
11.25	·1138
11.54	·1146
12.17	·1138
12.44	·1137
14.55	·1148
	***
16.25	·1138
16.54	·1141
	***
19.55	·1143
	***
22.55	·1117
23.25	·1117
23.55	·1122
	(†)

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h. m.	
Oct. 30	
0. 0	·02475
1. 4:	·02396
4.10	·01795
9.59:	·01656
17.51	·02018
23.59	·02412
Oct. 31	
0. 0	·02412
0.40:	·02400
6. 0	·01952
7.22	·01866
7.53	·01920
8.15	·01830
9.43	·01793
10.32	·01837
10.53	·01787
11.34	·01794
14.50	·02056
15. 0	·02050
18. 0	·02512 ·02456
19.52	·02538 ·02492
21.15	·02550 ·02455
23.59	·02580
Nov. 1	
0. 0	·02580
1.57	·02618 ·02[illegible]
3.11	·02476
6.33	·01932
8. 0	·01746
10.25	·01684
15.25	·01[illegible]
18.52	·01686
23.59	·01872

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h. m.	°	°
Oct. 30		
1. 0	50·0	51·5
3. 0	53·8	54·[illegible]
9. 0	54·5	55·0
22.22	49·0	51·0
Oct. 31		
8.46	51·5	52·5
21. 0	44·0	46·5
Nov. 1		
1.[illegible]	[illegible]	[illegible]
3. 0	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
21. 0	49·0	[illegible]

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

October 30. There was no trace for the Declination and Horizontal Force Magnets, owing to a stoppage of the time-piece.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 1								
h m	° ′ ″	h m		h m		h m	°	°
23. 14	21. 34. 25							
23. 43	36. 30							
23. 59	35. 30							
Nov. 2		Nov. 2		Nov. 2		Nov. 2		
0. 0	21. 35. 30		(†)	0. 0	·01874	1. 0	52·0	52·8
0. 7	35. 5	0. 6	·1118	1. 10	·01760	3. 0	55·0	55·2
0. 37	36. 30	0. 30	·1121	3. 51	·01886	9. 0	54·0	55·0
0. 59	35. 30	0. 55	·1113	7. 7	{ ·01796	21. 0	46·0	48·0
1. 15	37. 20	1. 17	·1118		·01966			
1. 43	35. 0		***	10. 30	·02026			
2. 30	33. 30	1. 50	·1113	13. 24	·02256			
3. 7	31. 15	2. 25	·1121	17. 22	·02717			
3. 40:	28. 10		***	19. 8	{ ·02725			
4. 13	29. 50	3. 17	·1116		·02606			
5. 50	27. 40	4. 6	·1131	22. 11	{ ·02652			
8. 36	28. 10	8. 23	·1139		·02427			
10. 44	30. 5	11. 0	·1150	23. 55	·02477			
10. 59	29. 15	11. 26	·1147		(†)			
11. 41	30. 50	11. 52	·1152					
12. 6	29. 30	12. 0	·1147					
12. 40	33. 20	12. 15	·1151					
	***	12. 20	·1150					
13. 10	31. 55	12. 40	·1152					
13. 24	33. 0	12. 47	·1146					
14. 45	29. 30	12. 55	·1151					
16. 0	30. 0	13. 8	·1149					
16. 56	31. 30	13. 22	·1155					
17. 29	33. 30	15. 15:	·1161					
18. 28	29. 30	17. 1	·1155					
20. 39	28. 10	18. 0	·1166					
	***		***					
23. 39	37. 35	19. 4	·1170					
23. 45	35. 30		***					
23. 59	36. 30	21. 55	·1160					
		22. 25	·1145					
		23. 23	·1133					
		23. 39	·1135					
		23. 45	·1127					
		23. 59	·1127					
Nov. 3		Nov. 3		Nov. 3		Nov. 3		
0. 0	21. 36. 30	0. 0	·1127		(†)	1. 0	49·0	51·0
0. 15	35. 45	0. 46	·1128	0. 45	·02472	3. 0	54·0	54·8
0. 40	36. 30	0. 55	·1125	1. 43	·02375	9. 0	55·0	57·0
0. 44	37. 45	1. 38	·1136	3. 40	·01887	21. 0	51·4	53·0
0. 56	33. 20	1. 44	·1130	7. 28	{ ·01826			
1. 0	35. 10	2. 15	·1129		·01925			
1. 18	33. 20	2. 30	·1123	11. 45	·01873			
1. 44	34. 15	2. 54	·1128	19. 15	·02184			
2. 14	37. 5	3. 35	·1126	22. 30	·02230			
2. 33	35. 0		***	23. 59	·02186			
2. 43	36. 0	4. 30	·1113					
	***		***					
3. 54	34. 35	5. 10	·1121					
4. 30	31. 30	5. 28	·1120					
4. 44	32. 10	6. 1	·1128					
5. 18	32. 30	6. 15	·1124					
5. 36	30. 40	6. 45	·1126					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 3		Nov. 3						
h m	° ′ ″	h m		h m		h m	°	°
5. 58	21. 25. 35	7. 20	·1121					
6. 30	30. 0	7. 36	·1123					
6. 50	29. 5	7. 43	·1121					
7. 40	28. 35	8. 29	·1134					
8. 0	26. 20	8. 40	·1124					
8. 25	25. 45	9. 4	·1128					
8. 40	28. 30	9. 17	·1142					
9. 12	26. 30	9. 30	·1133					
9. 50	27. 30	9. 51	·1135					
10. 26	20. 30	10. 15	·1130					
10. 30	22. 0	10. 40	·1152					
10. 51	12. 10	10. 50	·1148					
11. 22	28. 30	11. 13	·1136					
11. 43	24. 0	11. 28	·1141					
12. 7	20. 50	11. 46	·1130					
12. 26	22. 30		***					
13. 2	30. 30	12. 45	·1132					
14. 54	30. 30	13. 30	·1144					
15. 10	33. 30	14. 7	·1142					
15. 36	31. 30	14. 42	·1144					
15. 52	32. 40	15. 12	·1139					
16. 29	30. 0	15. 38	·1147					
18. 5	28. 20	15. 55	·1145					
19. 37	27. 30	16. 15	·1151					
21. 56	29. 20	17. 53	·1152					
22. 58	32. 55	19. 45	·1144					
23. 11	32. 0	20. 10	·1138					
23. 40	34. 20	21. 20	·1133					
23. 59	34. 30	22. 0	·1124					
		23. 25	·1121					
		23. 59	·1123					
Nov. 4		Nov. 4		Nov. 4		Nov. 4		
0. 0	21. 34. 30	0. 0	·1123	0. 0	·02186	1. 0	54·0	55·0
2. 15	33. 30	0. 22	·1125	1. 22	·02092	3. 0	45·0	47·0
3. 43	30. 45	0. 40	·1121	3. 15	{ ·01847	9. 0	56·5	58·0
5. 12	29. 20	4. 45	·1126		·01868	21. 0	53·0	55·0
5. 44	26. 45	5. 10	·1124	4. 12	{ ·01864			
6. 4	28. 30	5. 50	·1129		·01950			
	***	7. 10	·1135	4. 53	·01917			
10. 49	25. 30	8. 0	·1133	12. 45	·01952			
	***		***	22. 30	·02312			
14. 52	31. 15	9. 40	·1133	23. 59	·02332			
19. 18	29. 30		***					
21. 42	31. 40	14. 15	·1143					
23. 33	37. 0	16. 30	·1149					
23. 59	35. 30	18. 40	·1147					
		19. 21	·1140					
		20. 45	·1139					
		22. 30	·1125					
		23. 15	·1122					
		23. 45	·1126					
			(†)					
Nov. 5		Nov. 5		Nov. 5		Nov. 5		
0. 0	21. 35. 30		(†)	0. 0	·02332	1. 0	55·0	56·0
0. 10	35. 0	0. 15	·1118	0. 57	·02323	3. 0	56·8	57·0
1. 15	36. 30	1. 25	·1125	6. 0	{ ·01868	9. 0	56·5	58·0
1. 31	35. 20		***		·02020	21. 0	49·0	51·5

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 5		Nov. 5		Nov. 5				
h m	° ′ ″	h m		h m		h m	°	°
3. 0	21. 34. 45	2. 45	·1123	7. 24	·01960			
3. 30	32. 40	3. 0	·1127	12. 13	·02056			
4. 59	29. 15	3. 35	·1125	15. 15	·02280			
10. 25	30. 15	4. 30	·1135	19. 50	·02763			
11. 44	29. 30	6. 30	·1139	23. 59	·02780			
12. 15	26. 10	7. 15	·1137					
13. 20	28. 20	9. 55	·1147					
13. 29	28. 0	11. 33	·1144					
14. 30	29. 35	11. 53	·1152					
20. 44	27. 30	12. 10	·1142					
20. 56	28. 30	12. 28	·1147					
21. 27	28. 30	12. 45	·1142					
23. 53	32. 30		***					
	(†)	14. 45	·1146					
		18. 10:	·1152					
		22. 57	·1153					
		23. 55	·1137					
			(†)					
Nov. 6		Nov. 6		Nov. 6		Nov. 6		
0. 6	21. 33. 20	0. 0	·1135	0. 0	·02780	1. 0	52·0	53·0
0. 43	34. 0		***	1. 19	·02724	3. 0	54·0	55·0
3. 30	31. 0	3. 10	·1141	6. 30:	·02164	9. 0	51·5	53·0
5. 24	30. 30	3. 30	·1125	9. 7	·02217	22. 0	45·0	48·5
6. 0	29. 45	3. 45	·1125	14. 45	·02580			
7. 11	29. 35	4. 0	·1112	16. 40	·02743			
7. 42	27. 30	7. 0	·1128	21. 40	·02738 ·02670			
8. 44	30. 0		***					
9. 40	29. 30	9. 41	·1127	23. 59	·02693			
9. 53	28. 20	10. 39	·1132					
11. 26	24. 40	11. 0	·1127					
12. 50	25. 0	11. 44	·1127					
13. 7	24. 30	12. 15	·1134					
13. 23	25. 50		***					
13. 45	25. 10	14. 15	·1139					
14. 12	26. 15	14. 30	·1137					
14. 27	26. 55	15. 45	·1140					
15. 10	28. 30	16. 25	·1139					
15. 36	27. 20		***					
16. 15	28. 35	18. 30	·1146					
17. 11	28. 50	21. 30	·1131					
17. 29	28. 10	23. 15	·1125					
17. 59	28. 30	23. 23	·1125					
18. 26	27. 10	23. 59	·1127					
18. 46	28. 30							
20. 39	27. 30							
21. 12	28. 30							
22. 18	32. 30							
23. 13	37. 20							
23. 30	34. 15							
23. 59	34. 55							
Nov. 7		Nov. 7		Nov. 7		Nov. 7		
0. 0	21. 34. 55	0. 0	·1128	0. 0	·02693	6. 40	49·5	51·6
2. 49	31. 50	2. 55	·1135	1. 12	·02690	21. 0	47·0	48·3
3. 30	30. 30	4. 53	·1135	8. 28:	·02200			
5. 52	30. 0	8. 30	·1143	12. 40	·02244			
6. 30	30. 25	9. 35	·1138	20. 10	·02508			
7. 13	28. 30	9. 55	·1140	23. 59	·02512			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 7		Nov. 7						
h m	° ′ ″	h m		h m		h m	°	°
9. 28	21. 29. 10	10. 22	·1138					
10. 5	24. 20	10. 41	·1130					
10. 45	25. 35		***					
11. 18	20. 50	13. 30	·1134					
12. 4	23. 35	14. 10	·1139					
12. 36	23. 20	14. 30	·1137					
12. 59	25. 0		***					
13. 26	28. 0	18. 5:	·1147					
14. 45	30. 0	22. 7	·1123					
17. 28	29. 10	23. 0	·1120					
20. 3	26. 30	23. 59	·1117					
21. 24	26. 30							
22. 40	30. 0							
22. 50	31. 30							
23. 10	31. 45							
23. 15	33. 20							
23. 36	32. 15							
23. 59	33. 35							
Nov. 8		Nov. 8		Nov. 8		Nov. 8		
0. 0	21. 33. 35	0. 0	·1117	0. 0	·02512	1. 0	49·2	51·0
0. 13	34. 20	0. 45	·1122	2. 30	·02330	3. 0	52·0	52·0
1. 8	33. 30	1. 7	·1120	6. 22	·01770	9. 0	54·0	55·0
1. 20	34. 0		***	11. 55	·01724	21. 0	50·0	51·5
2. 10	31. 30	2. 24	·1131	20. 11	·02016			
2. 20	32. 30	2. 38	·1126	22. 50	·02150			
3. 59	29. 30	4. 0	·1124	23. 59	·02173			
5. 50	28. 30	4. 55	·1128					
8. 40	28. 30	9. 46	·1134					
11. 10	30. 15	10. 4	·1136					
	***		***					
16. 12	31. 0	12. 54	·1135					
17. 10	29. 35	17. 10	·1141					
20. 43	28. 40	19. 55	·1137					
20. 52	30. 10	21. 45	·1126					
21. 25	29. 30	22. 30:	·1117					
21. 52	31. 20	23. 40	·1121					
22. 11	31. 50	23. 59	·1123					
23. 59	33. 40							
Nov. 9		Nov. 9		Nov. 9		Nov. 9		
0. 0	21. 33. 40	0. 0	·1123	0. 0	·02173	1. 0	52·0	52·7
0. 56	34. 5	0. 30	·1127	1. 45	·02097	3. 0	54·2	54·7
1. 14	35. 30	1. 0	·1118	4. 11	·01760 ·01807	9. 0	52·0	53·0
1. 54	33. 30	2. 7	·1116			21. 0	42·2	44·8
3. 43	30. 5	6. 6	·1128	6. 50	·01733			
5. 36	28. 40	11. 30	·1140	8. 11	·01770 ·01628			
6. 13	29. 30	11. 55	·1136					
	***	12. 9	·1139	11. 0	·02136			
11. 58	29. 10	12. 20	·1136	15. 12	·02684 ·02618			
	***	13. 45	·1147					
12. 36	28. 10	19. 40	·1151	22. 45	·02653 ·02564			
	***	21. 25	·1142					
13. 22	29. 35	23. 14	·1126	23. 59	·02570			
	***	23. 45	·1127					
19. 6	29. 10	23. 59	·1124					
21. 21:	27. 30							
23. 59	34. 10							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Nov.10	
h m	° ′ ″
0. 0	21. 34. 10
0. 40	33. 15
0. 50	33. 40
1. 25	33. 55
1. 44	34. 30
2. 27	33. 40
2. 52	31. 30
5. 12	29. 15
7. 45	30. 20
8. 16	29. 0
8. 32	30. 30
8. 54	27. 30
9. 10	26. 35
	***
9. 45	27. 25
9. 55	28. 50
10. 15	27. 30
10. 54	28. 50
11. 7	28. 20
13. 27	31. 40
14. 0	30. 0
14. 52	30. 5
15. 6	29. 30
15. 29	32. 30
16. 6	33. 0
17. 7	21. 45
17. 30	24. 50
18. 10	27. 0
18. 38	27. 0
19. 0	27. 55
19. 12	27. 25
19. 28	28. 5
	***
20. 37	26. 30
21. 24	27. 20
	***
22. 0	28. 45
22. 10	27. 40
	***
23. 15	34. 30
23. 59	34. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Nov.10	
h m	
0. 0	·1129
0. 21	·1130
1. 9	·1131
	***
2. 50	·1127
5. 40:	·1138
7. 54	·1132
8. 30	·1132
8. 47	·1122
9. 55	·1134
10. 5	·1132
10. 40	·1140
11. 0	·1137
11. 19	·1142
11. 34	·1140
	***
14. 25	·1148
15. 15	·1153
15. 38	·1151
15. 55	·1158
16. 46	·1163
17. 39	·1155
	***
20. 10	·1151
21. 48	·1141
22. 12	·1131
	***
23. 58	·1124

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Nov.10	
h m	
0. 0	·02570
1. 45	·02508
5. 52:	·01897
8. 25	·01706
11. 39:	·01675
20. 0	·02166
22. 43	·02264
23. 45	·02261
	(†)

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet
Nov.10		
h m	°	°
1. 0	44·3	46·0
3. 0	47·0	48·0
9. 0	48·3	49·1
21. 0	44·0	46·0

Greenwich Mean Solar Time.	Western Declination.
Nov.11	
0. 0	21. 34. 0
0. 8	33. 45
0. 21	35. 20
0. 33	34. 10
0. 45	35. 5
2. 40	32. 30
4. 14	30. 40
5. 32	30. 30
5. 47	29. 0
6. 44	31. 50
9. 0	29. 15
13. 12	29. 0
14. 21	31. 30
	***
15. 6	30. 50
	***
Nov.11	
h m	° ′ ″
17. 15	21. 31. 50
	***
18. 31	29. 40
19. 0	30. 5
19. 25	28. 45
19. 34	29. 10
19. 57	27. 45
	***
20. 26	29. 0
20. 52	27. 20
	***
22. 43	30. 10
22. 59	32. 10
23. 36	33. 40
23. 45	33. 0
23. 57	36. 30
23. 59	35. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Nov.11	
0. 0	·1125
1. 57	·1121
4. 15	·1125
5. 26	·1128
5. 50	·1122
6. 30	·1125
6. 54	·1122
8. 40	·1131
12. 35	·1140
13. 24	·1138
17. 25	·1148
17. 55	·1157
	***
19. 30	·1156
	***
Nov.11	
h m	
21. 12	·1142
21. 25	·1144
21. 49	·1131
22. 15	·1132
22. 45	·1132
22. 52	·1125
23. 55	·1115
	(†)

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Nov.11	
	(†)
0. 55	·02163
2. 0	·02063
3. 10	·01783
9. 7	·01692
16. 39	·01922
22. 15	·02700
23. 59	·02713

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet
Nov.11		
1. 0	47·0	48·3
3. 0	51·0	51·4
9. 0	52·0	52·0
21. 0	43·8	46·0

Greenwich Mean Solar Time.	Western Declination.
Nov.12	
0. 0	21. 35. 30
0. 25	36. 0
0. 30	38. 40
0. 44	36. 40
0. 48	37. 15
1. 15	33. 0
1. 24	34. 55
1. 30	34. 0
1. 41	34. 15
1. 52	31. 30
1. 58	32. 45
2. 13	33. 0
2. 26	34. 40
	***
2. 45	33. 10
	***
3. 30	32. 30
3. 45	30. 0
3. 51	30. 45
6. 12	28. 40
6. 45	29. 30
8. 15	29. 10
8. 52	28. 15
11. 40	30. 10
16. 0	30. 40
	***
21. 30	28. 30
	***
23. 15	33. 30
23. 33	33. 20
23. 40	34. 20
23. 45	33. 0
23. 59	34. 10

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Nov.12	
	(†)
0. 5	·1118
	***
0. 30	·1112
0. 39	·1118
	***
1. 23	·1102
1. 40	·1108
1. 55	·1102
2. 27	·1126
	***
3. 38	·1124
3. 53	·1113
4. 30	·1121
6. 40	·1121
7. 39	·1124
8. 0	·1129
8. 28	·1129
8. 57	·1136
	***
15. 10	·1142
16. 55	·1142
18. 35	·1150
19. 12	·1145
20. 0	·1147
21. 0	·1135
21. 4	·1138
21. 40	·1130
21. 50	·1135
21. 55	·1130
22. 10	·1134
23. 59	·1125

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Nov.12	
0. 0	·02713
1. 57	·02558
3. 58	·02167
7. 44:	·01744
12. 48	·01964
20. 35	·02718
21. 20	{ ·02718 ·02529
23. 45	·02596
	(†)

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
Nov.12		
1. 0	47·3	48·4
3. 0	50·8	51·0
9. 0	50·6	51·0
21. 0	43·0	45·0

Greenwich Mean Solar Time.	Western Declination.
Nov.13	
0. 0	21. 34. 10
0. 36	34. 20
0. 41	35. 55
1. 5	33. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Nov.13	
0. 0	·1125
0. 15	·1126
0. 28	·1122
0. 44	·1128

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Nov.13	
	(†)
0. 14	·02580
1. 52	·02447
5. 43	·01776

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
Nov.13		
1. 0	46·7	47·3
4. 0	49·8	50·0
9. 0	51·0	51·3
22. 0	48·5	50·5

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
Nov.13	
h m	° ′ ″
2. 16	21. 35. 20
2. 26	34. 0
2. 36	35. 30
4. 37	31. 30
5. 50	30. 40
6. 45	32. 10
7. 26	30. 55
7. 45	28. 20
8. 11	25. 30
8. 15	30. 30
9. 7	17. 15
10. 22	27. 30
12. 40	29. 50
13. 14	28. 45
14. 27	30. 0
15. 59	30. 10
17. 11	28. 15
	***
18. 55	28. 30
19. 15	27. 35
	***
21. 28	26. 30
21. 35	27. 0
22. 58	31. 30
23. 20	31. 15
23. 45	32. 30
23. 59	32. 30
Nov.14	
0. 0	21. 32. 30
2. 8	31. 40
3. 32	29. 20
4. 0	29. 40
4. 30	31. 15
5. 14	31. 0
6. 10	28. 30
9. 22	28. 30
9. 39	26. 30
10. 22	28. 15
10. 55	27. 40
11. 30	29. 0
11. 43	28. 30
11. 52	28. 20
12. 13	25. 40
13. 15	28. 30
13. 30	28. 0
14. 44	29. 50
16. 15	29. 30
17. 23	32. 45
17. 55	31. 30
	***
19. 38	32. 30
19. 55	30. 45
20. 17	29. 55
	***
22. 62	34. 15
23. 22	37. 30
23. 59	37. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Nov.13	
h m	
2. 22	·1129
	***
3. 30	·1114
4. 0	·1119
4. 16	·1118
5. 0:	·1123
5. 51	·1118
6. 25	·1121
7. 18	·1117
7. 30	·1112
8. 9	·1119
8. 30	·1099
8. 42	·1104
8. 46	·1099
9. 14	·1117
9. 40	·1118
9. 45	·1114
10. 55	·1126
	***
14. 12	·1128
17. 25	·1137
18. 15	·1134
19. 30:	·1134
	***
22. 30	·1119
23. 59	·1121
Nov.14	
	(†)
0. 47	·1124
2. 40	·1119
3. 25	·1124
3. 46	·1123
4. 14	·1127
4. 45	·1120
	***
5. 45	·1126
6. 15	·1132
9. 30	·1128
9. 55	·1131
11. 54	·1133
12. 15	·1144
12. 55	·1133
16. 40	·1137
17. 45:	·1146
19. 30	·1128
19. 45	·1129
20. 35	·1122
22. 6	·1110
23. 59	·1094

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Nov.13	
h m	
9. 11	·01764
12. 58	·01717
21. 11	·01906
23. 59	·01950
Nov.14	
0. 0	·01950
2. 39	·01972
8. 22	·01980
12. 45	·01855
19. 27	·02277
23. 59	·02517

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Nov.14		
8. 35	48·3	49·0
21. 0	45·5	47·0

Greenwich Mean Solar Time.	Western Declination.
Nov.15	
h m	° ′ ″
0. 0	21. 37. 0
0. 30	35. 20
0. 54	31. 15
1. 42	33. 30
1. 45	34. 45
2. 13	33. 20
2. 54	34. 20
3. 12	32. 40
3. 57	31. 55
4. 22	28. 30
4. 30	28. 35
4. 43	26. 55
5. 12	30. 40
5. 39	30. 55
6. 0	29. 35
6. 12	30. 0
6. 24	29. 10
6. 57	30. 5
7. 14	29. 10
8. 45	29. 10
9. 25	26. 30
9. 36	28. 0
10. 12	28. 15
	***
10. 58	25. 20
	***
11. 32	26. 15
11. 43	25. 0
11. 55	27. 30
12. 15	26. 35
12. 44	28. 15
12. 59	27. 30
13. 54	28. 0
14. 51	33. 35
15. 40	28. 50
16. 0	30. 0
16. 15	28. 40
17. 2	28. 45
17. 27	31. 30
18. 0	32. 35
18. 45	28. 10
19. 1	28. 30
19. 28	27. 35
21. 6	27. 20
21. 40	29. 10
22. 15	29. 25
22. 45	32. 30
23. 0	31. 30
23. 22	33. 30
23. 59	33. 30
Nov.16	
0. 0	21. 33. 30
0. 14	35. 35
0. 22	35. 20
0. 39	36. 50
1. 28	34. 0
1. 41	35. 20
1. 58	33. 45

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Nov.15	
h m	
0. 0	·1094
1. 40	·1106
2. 15	·1096
2. 52	·1102
3. 25	·1100
3. 58	·1103
4. 40	·1086
5. 10	·1104
5. 30	·1104
5. 55	·1099
6. 55	·1114
7. 40	·1118
9. 15	·1115
10. 0	·1118
11. 0	·1114
11. 40	·1118
12. 0	·1127
12. 30	·1128
12. 54	·1124
13. 39	·1127
14. 25	·1124
15. 0	·1132
15. 31	·1134
15. 55	·1128
16. 35	·1135
17. 45	·1129
18. 25	·1131
19. 10	·1127
19. 41	·1127
22. 14	·1111
22. 31	·1115
23. 0	·1106
23. 15	·1109
23. 45	·1106
	(†)
Nov.16	
0. 0	·1103
0. 20	·1093
0. 30	·1097
0. 55	·1092
1. 31	·1099
2. 8	·1093
2. 35	·1104

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Nov.15	
h m	
0. 0	·02517
2. 6	·02475
4. 13	{ ·02276 ·02470
6. 54	·02476
12. 15	{ ·02727 ·02644
21. 10	{ ·02643 ·02457
23. 59	·02478
Nov.16	
0. 0	·02478
1. 11	·02433
6. 22	·01973
10. 20	·01895
16. 26	·01970
22. 25	·02148
23. 59	·02140

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.15		
h m	°	°
1. 0	47·2	47·6
3. 0	49·6	[illegible]
9. 0	48·0	47·7
21. 0	43·5	45·0
Nov.16		
1. 0	45·7	47·[illegible]
3. 0	48·[illegible]	49·[illegible]
9. 0	47·4	46·[illegible]
21. 0	45·[illegible]	[illegible]

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 16		Nov. 16		Nov. 16				
h m	° ′ ″	h m		h m		h m	°	°
2. 27	21. 33. 30	3. 15	·1106					
2. 39	34. 10	4. 0	·1103					
2. 51	33. 0		***					
4. 5	30. 20	5. 16	·1104					
4. 43	30. 5	5. 44	·1111					
4. 55	31. 30	5. 55	·1102					
5. 13	31. 30	6. 14	·1102					
5. 43	28. 30	6. 53	·1116					
5. 48	28. 55	7. 39	·1111					
6. 35	19. 35	7. 55	·1114					
7. 19	25. 45	8. 10	·1111					
7. 42	25. 50	8. 30	·1115					
7. 57	27. 20	8. 51	·1112					
8. 10	27. 30	9. 45	·1120					
8. 26	25. 30		***					
8. 44	27. 0	11. 40	·1126					
9. 45	26. 30	12. 50	·1124					
10. 51	29. 20	14. 0	·1127					
14. 11	28. 50	14. 30	·1131					
14. 24	30. 0	17. 45	·1136					
14. 42	29. 15	20. 28	·1132					
20. 45	28. 20	20. 45	·1126					
	***	21. 55	·1114					
21. 57	30. 10	22. 21	·1120					
22. 10	31. 30	23. 7	·1110					
22. 14	31. 0	23. 59	·1114					
22. 25	32. 40							
22. 37	33. 10							
23. 12	33. 0							
23. 30	34. 20							
23. 59	34. 0							
Nov. 17		Nov. 17		Nov. 17		Nov. 17		
0. 0	21. 34. 0	0. 0	·1114	0. 0	·02149	1. 0	48 ·0	48 ·0
0. 31	33. 30	2. 15	·1107	1. 40	·02055	3. 0	50 ·0	50 ·0
0. 42	34. 0	2. 55	·1102	3. 28	{ ·01856	9. 0	49 ·5	50 ·0
2. 0	31. 45	4. 50	·1117		·01949	21. 0	42 ·8	44 ·0
2. 15	31. 50	8. 30	·1126	5. 51	·01937			
3. 0	29. 50	11. 15	·1128	10. 21 :	·02063			
5. 45	28. 10	13. 15	·1133	13. 41	·02277			
9. 30	27. 50	13. 43	·1141	16. 58	·02577			
13. 30	30. 0	14. 10	·1134	21. 7	·02649			
13. 42	31. 0		***	23. 59	·02566			
14. 15	27. 0	14. 55	·1141					
14. 51	28. 50	16. 38	·1139					
15. 22	27. 25	17. 30	·1146					
15. 30	28. 45	20. 30	·1130					
15. 41	27. 45	21. 0	·1124					
15. 56	27. 25		(†)					
16. 10	28. 30	23. 45	·1114					
17. 7	28. 30	23. 59	·1117					
17. 15	27. 20							
17. 40	26. 30							
19. 12	28. 25							
19. 30	30. 10							
20. 10	30. 0							
21. 57	33. 20							
22. 24	32. 40							
22. 55	33. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 17								
h m	° ′ ″	h m		h m		h m	°	°
23. 22	21. 32. 20							
23. 29	32. 45							
23. 43	31. 55							
23. 52	32. 25							
	(†)							
Nov. 18		Nov. 18		Nov. 18		Nov. 18		
	(†)	0. 0	·1117	0. 0	·02566	1. 0	45 ·2	45 ·8
0. 7	21. 33. 50	1. 10	·1113	2. 10	·02467	3. 0	47 ·8	48 ·0
0. 21	35. 25	1. 15	·1107	7. 52 :	·01865	9. 0	47 ·8	48 ·0
0. 33	34. 20	1. 43	·1100	13. 40	·02093	21. 0	40 ·0	42 ·0
0. 41	35. 30	2. 8	·1102	18. 30	{ ·02025			
0. 51	34. 20	3. 0	·1097		·02457			
1. 5	34. 45	3. 28	·1085	21. 52	·02626			
1. 41	32. 30	3. 45	·1095	23. 0	·02607			
2. 10	35. 30	4. 10	·1091	23. 59	·02625			
3. 10	33. 0		***					
3. 39	27. 30	5. 15	·1103					
4. 12	30. 45	6. 14	·1113					
4. 28	31. 20	6. 50	·1114					
4. 52	29. 45	7. 30	·1110					
5. 10	30. 40	7. 45	·1116					
5. 39	28. 15	7. 56	·1108					
6. 11	27. 35	8. 15	·1105					
7. 11	29. 30	8. 40	·1113					
7. 41	27. 20		***					
7. 52	23. 0	9. 55	·1113					
8. 39	25. 30	10. 15	·1120					
	***	10. 30	·1115					
10. 10	25. 55		***					
10. 18	27. 30	12. 5	·1115					
10. 53	22. 30		***					
11. 10	24. 20	12. 58	·1124					
11. 21	22. 30	13. 15	·1117					
	***	13. 30	·1125					
12. 3	22. 35		***					
12. 25	26. 20	15. 8	·1132					
12. 40	24. 10		***					
12. 55	26. 30	16. 0	·1128					
13. 12	22. 30	16. 24	·1140					
14. 0	30. 5	16. 30	·1134					
14. 15	27. 30	17. 24	·1130					
14. 40	29. 50		***					
15. 0	28. 45	18. 27	·1143					
15. 44	33. 45	18. 50	·1131					
15. 58	33. 30	20. 0	·1122					
16. 12	31. 50	20. 10	·1113					
16. 30	32. 30	20. 20	·1124					
16. 52	31. 40	20. 24	·1114					
17. 12	32. 35	21. 0	·1114					
17. 38	30. 40	22. 1	·1094					
18. 14	31. 0	22. 24	·1106					
18. 40	33. 30	23. 16	·1095					
18. 50	33. 25	23. 36	·1105					
19. 13	34. 30	23. 59	·1100					
19. 20	36. 35							
19. 38	36. 30							
19. 43	38. 30							
	***							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 18								
h m	° ′ ″	h m		h m		h m	°	°
20. 0	21. 39. 20							
20. 11	37. 20							
20. 17	38. 55							
20. 44	33. 0							
21. 45	35. 20							
21. 58	33. 45							
22. 15	37. 35							
	***							
23. 56	39. 20							
	(†)							
Nov. 19		Nov. 19		Nov. 19		Nov. 19		
	(†)	0. 0	·1100	0. 0	·02625	1. 0	43·0	43·8
0. 7	21. 37. 45		***	2. 30	·02597	3. 0	45·8	45·8
	***	0. 53	·1095	5. 24	·02284	9. 0	46·0	46·0
0. 53	39. 30	1. 9	·1099	7. 10	·02153	21. 0	39·0	41·0
1. 28	39. 0	1. 40	·1095	10. 43	·02072			
1. 40	38. 15	1. 55	·1099	14. 15	·02243			
1. 52	40. 55	2. 15	·1084	19. 15	·02646 ·02567			
2. 16	33. 50		***					
2. 40	30. 45	3. 10	·1097	21. 24	·02612 ·02510			
3. 10	34. 35	3. 17	·1093					
3. 28	32. 40	3. 57	·1101	22. 47	·02520			
3. 43	33. 45	4. 3	·1098	23. 59	·02467			
4. 5	33. 20	4. 15	·1101					
4. 14	34. 0	4. 44	·1068					
4. 43	5. 15	5. 0	·1123					
5. 11	26. 35	5. 27	·1085					
5. 24	25. 30	5. 38	·1091					
5. 36	29. 0	5. 45	·1085					
5. 45	28. 0	6. 35	·1098					
6. 22	27. 30	6. 48	·1090					
6. 30	29. 20	7. 0	·1094					
6. 50	28. 45	7. 10	·1090					
7. 0	29. 30	7. 26	·1094					
7. 15	25. 30	7. 48	·1089					
7. 43	27. 20	8. 23	·1096					
8. 2	25. 30	8. 30	·1095					
8. 26	27. 20	8. 45	·1100					
8. 35	27. 5	9. 10	·1103					
8. 52	28. 20	9. 27	·1120					
9. 25	26. 0	9. 40	·1110					
9. 43	30. 0	9. 54	·1118					
9. 52	27. 20	10. 5	·1108					
10. 26	34. 40	10. 14	·1118					
10. 48	30. 40	10. 29	·1108					
11. 15	26. 20	11. 14	·1129					
11. 45	28. 50	11. 52	·1115					
12. 7	28. 30	12. 14	·1117					
12. 28	29. 30	12. 41	·1125					
13. 0	26. 55		***					
13. 11	27. 30	14. 0	·1131					
	***	14. 45	·1126					
14. 21	23. 30		***					
14. 38	26. 5	16. 0	·1131					
14. 53	26. 15		***					
15. 22	29. 0	17. 45	·1129					
15. 30	28. 10	18. 0	·1133					
15. 52	28. 55	18. 24	·1128					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 19		Nov. 19						
h m	° ′ ″	h m		h m		h m	°	°
16. 10	21. 27. 45	19. 0	·1135					
16. 21	30. 0	19. 30	·1129					
16. 38	30. 45		***					
17. 11	30. 0	20. 0	·1138					
17. 30	32. 10		***					
17. 45	30. 10	20. 30	·1136					
18. 25	32. 40	20. 55	·1128					
19. 15	30. 40	21. 30	·1129					
19. 26	28. 30	22. 10	·1124					
19. 29	30. 40		***					
	***	23. 59	·1114					
20. 25	31. 0							
	***							
20. 58	29. 10							
	***							
21. 32	30. 20							
21. 45	29. 10							
23. 13	23. 0							
23. 44	32. 0							
23. 52	32. 40							
23. 59	32. 30							
Nov. 20		Nov. 20		Nov. 20		Nov. 20		
0. 0	21. 32. 30	0. 0	·1114	0. 0	·02467	1. 0	44·0	45·5
0. 12	31. 50	1. 13	·1108	1. 54	·02220	3. 0	45·7	45·7
0. 18	33. 40	1. 41	·1115	4. 52	·01713	9. 0	46·0	47·0
0. 38	34. 30	2. 37	·1107	7. 36	·01672	22. 30	41·0	41·7
1. 13	32. 30	3. 47	·1115	10. 53	·01680			
1. 40	34. 0		***	13. 43	·01772			
1. 45	33. 5	4. 52	·1115	23. 59	·02323			
2. 13	33. 40	4. 58	·1105					
2. 39	31. 45	5. 10	·1110					
2. 53	32. 25	5. 14	·1106					
4. 40	30. 40		***					
4. 52	31. 45	6. 0	·1120					
5. 15	28. 30		***					
7. 12	31. 0	7. 20	·1119					
7. 50	20. 45	7. 36	·1108					
8. 0	20. 20	7. 53	·1116					
8. 21	22. 55	8. 5	·1103					
8. 40	30. 0	8. 15	·1105					
9. 10	27. 50	8. 28	·1115					
9. 15	28. 20	8. 44	·1110					
9. 43	26. 30	9. 0	·1116					
10. 0	29. 45	9. 10	·1113					
10. 22	29. 35	9. 33	·1113					
10. 36	31. 20	9. 55	·1119					
11. 0	30. 5	10. 7	·1117					
11. 33	30. 0	10. 18	·1121					
12. 0	31. 20	10. 30	·1117					
15. 28	31. 55		***					
20. 39	29. 30	11. 33	·1125					
	***	13. 30	·1126					
23. 45	33. 20	16. 55	·1134					
23. 59	33. 15	19. 20	·1130					
		21. 20	·1122					
		22. 30	·1124					
		23. 59	·1125					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov.21		Nov.21		Nov.21		Nov.21		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 33. 15	0. 0	·1125	0. 0	·02323	7. 35	44·0	45·5
0. 14	32. 55	2. 0	·1125	2. 0:	·02357	21. 0	40·0	42·0
1. 7	33. 30	6. 25	·1134	7. 11	·02096			
1. 15	32. 40	7. 43	·1134	11. 3	·02032			
3. 37	30. 50	8. 2	·1130	15. 10:	·02156			
5. 24	29. 0	8. 24	·1131	19. 30	·02396 ·02322			
7. 44	28. 30	8. 42	·1123	22. 4	·02412			
8. 30	29. 45	9. 30:	·1131	23. 59	·02367			
8. 52	26. 45	11. 45	·1127					
9. 10	26. 50	12. 15	·1131					
9. 45	29. 30	12. 40	·1133					
10. 40	29. 35	13. 24	·1128					
10. 51	28. 0	16. 40	·1136					
12. 0	30. 30	17. 25	·1139					
12. 22	28. 5	18. 30	·1132					
13. 12	30. 0	18. 47	·1134					
13. 23	29. 30	19. 24	·1147					
13. 52	28. 0	20. 13	·1140					
14. 45	31. 25	21. 10	·1122					
15. 45	31. 30	23. 59	·1113					
16. 14	29. 25							
17. 19	28. 30							
18. 42	32. 10							
19. 30	29. 10							
19. 52	30. 40							
	***							
20. 42	30. 15							
	***							
21. 44	32. 25							
21. 59	31. 30							
22. 40	33. 40							
22. 58:	32. 30							
23. 30	34. 40							
23. 48	33. 40							
23. 59	34. 0							
Nov.22		Nov.22		Nov.22		Nov.22		
0. 0	21. 34. 0	0. 0	·1113	0. 0	·02367	1. 0	44·0	44·6
0. 44	36. 20	0. 45	·1114	1. 40	·02195	3. 0	47·5	47·8
1. 15	34. 35	1. 10	·1110	3. 43	·01766 ·01862	9. 6	47·3	47·8
1. 41	35. 30	2. 5	·1110	7. 50	·01700	21. 0	37·8	40·0
2. 43	31. 25	3. 5	·1116	11. 52:	·01872			
3. 14	32. 10	3. 44	·1108	18. 22	·02696 ·02633			
3. 45	29. 50	4. 30	·1115	21. 7	·02637 ·02552			
5. 58	28. 30	5. 14	·1116	23. 59	·02666			
7. 14	29. 30	5. 35	·1113					
8. 10	28. 30	6. 0	·1115					
	***	8. 35	·1118					
10. 12	28. 20	13. 7	·1129					
	***	18. 15:	·1141					
14. 19	32. 15	21. 28	·1136					
	***	21. 55	·1133					
19. 59	30. 10		***					
21. 6	29. 30	23. 13	·1129					
21. 45	29. 55	23. 59	·1129					
21. 55	29. 20							
22. 16	31. 0							
23. 11	31. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov.22								
h m	° ′ ″	h m		h m		h m	°	°
23. 45	21. 32. 35							
23. 59	32. 25							
Nov.23		Nov.23		Nov.23		Nov.23		
0. 0	21. 32. 25	0. 0	·1129	0. 0	·02666	1. 0	40·3	41·8
0. 25	31. 45		***	0. 45	·02646	3. 0	43·0	43·6
0. 40	33. 30	1. 40	·1130	7. 28:	·02023	9. 0	43·0	42·5
0. 51	32. 20	1. 51	·1123	16. 28	·02657 ·02603	21. 0	34·5	37·0
1. 14	33. 20	2. 30	·1126	19. 22	·02666 ·02596			
1. 20	32. 0	2. 45	·1122	20. 28	·02675			
1. 40	33. 10	3. 10	·1130	22. 58	·02719			
1. 49	31. 30	3. 55	·1125	23. 59	·02699			
2. 29	31. 55	5. 30	·1128					
2. 40	30. 45	6. 15	·1126					
	***	6. 45	·1133					
3. 24	31. 15	7. 23	·1131					
4. 42	39. 30	8. 57	·1133					
6. 44	30. 0	9. 45	·1131					
7. 12	31. 10	10. 43	·1136					
7. 41	30. 15	11. 0	·1131					
	***	11. 34	·1134					
13. 55	30. 0	11. 51	·1138					
14. 26	31. 20	12. 15	·1134					
14. 50	30. 40		***					
	***	13. 6	·1133					
17. 13	30. 40		***					
18. 7	29. 35	14. 40	·1142					
	***	15. 15	·1139					
20. 25	30. 40	16. 55	·1147					
20. 50	29. 50	18. 25	·1146					
22. 43	30. 15	21. 55	·1142					
22. 58	32. 35	22. 47	·1140					
23. 12	30. 50	23. 0	·1146					
	***	23. 14	·1138					
23. 29	32. 30		***					
	***	23. 59	·1131					
23. 59	31. 50							
Nov.24		Nov.24		Nov.24		Nov.24		
0. 0	21. 31. 50	0. 0	·1131	0. 0	·02699	1. 0	38·0	39·0
0. 40	32. 30	2. 39	·1125	1. 36	·02597	3. 0	41·0	42·0
	***	3. 26	·1130	6. 10	·01900	9. 0	44·0	44·0
1. 6	31. 0	4. 12	·1127	7. 55	·01722	21. 0	43·0	44·0
1. 39	31. 45	5. 25	·1131	11. 30	·01673			
2. 54	29. 30	5. 40	·1129	21. 28	·01694			
3. 14	30. 15	5. 58	·1131	23. 59	·01778			
	***	6. 48	·1127					
4. 0	29. 50	7. 0	·1130					
4. 15	28. 40	7. 40	·1130					
4. 30	29. 10	8. 10	·1139					
5. 0	28. 20	8. 45	·1128					
5. 28	28. 45	9. 5	·1132					
6. 0	28. 10	9. 24	·1128					
6. 19	28. 30	10. 1	·1127					
7. 0	27. 30	10. 38	·1132					
7. 39	27. 45	11. 40	·1125					
8. 0	22. 30	12. 55	·1125					
8. 36	26. 30	13. 11	·1129					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.24		Nov.24						
h m	° ′ ″	h m		h m		h m	°	°
8. 44	21. 25. 30	14. 44	·1132					
9. 10	27. 30	16. 52	·1135					
10. 30	25. 0	17. 45	·1133					
11. 16	26. 0	18. 12	·1137					
11. 44	24. 40	18. 35	·1133					
12. 30	26. 10	19. 7	·1137					
12. 55	24. 30	19. 45	·1133					
13. 43	27. 0	20. 0	·1136					
14. 6	26. 45	20. 14	·1134					
15. 13	28. 30	20. 45	·1136					
16. 45	28. 10	21. 45	·1124					
17. 12	29. 20	23. 59	·1121					
17. 16	29. 0							
17. 40	30. 50							
18. 10	29. 0							
18. 59	30. 50							
19. 12	30. 5							
	***							
21. 39	31. 30							
21. 57	30. 40							
22. 43	31. 20							
23. 12	33. 20							
23. 32	31. 30							
23. 45	32. 0							
23. 58	33. 30							
Nov.25		Nov.25		Nov.25		Nov.25		
	(†)	0. 0	·1120	0. 0	·01778	1. 0	47·0	47·0
0. 11	21. 32. 15	1. 0	·1113	3. 28	·01917	3. 0	49·0	49·3
0. 39	34. 5	1. 44	·1113	12. 7	·01886	9. 0	51·5	52·0
0. 59	34. 0	2. 30	·1109	23. 45	·01952	21. 0	53·0	53·5
	***		***		(†)			
1. 44	35. 50	3. 0	·1103					
2. 32	32. 35	5. 40	·1120					
2. 51	33. 20	5. 53	·1117					
3. 14	30. 50	6. 22	·1121					
3. 36	32. 30		***					
4. 0	32. 20	11. 41	·1126					
4. 29	33. 20	11. 55	·1134					
5. 27	29. 50	12. 15	·1128					
5. 45	30. 0		***					
	***	14. 10	·1126					
8. 28	27. 30	17. 35	·1130					
10. 46	28. 30	18. 15	·1127					
11. 16	26. 15	19. 56	·1132					
11. 44	28. 0		***					
11. 55	26. 20	21. 35	·1126					
	(†)	23. 59	·1107					
22. 8	30. 0							
23. 27	31. 50							
23. 38	33. 40							
	(†)							
		Nov.26		Nov.26		Nov.26		
		0. 0	·1104		(†)	1. 0	56·0	56·0
		0. 35	·1104	0. 13	·01944	3. 0	58·0	58·7
		0. 57	·1098	3. 39	·02058	9. 0	58·0	58·5
		1. 25	·1102	6. 50	·02053	21. 0	53·0	53·8
		1. 40	·1095	11. 39	·02175			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Nov.26		Nov.26				
h m	° ′ ″	h m		h m		h		
		2. 1	·1094	12. 12	·02166			
			***	14. 4	·02273			
		3. 0	·1108	15. 58	·02448			
		4. 0	·1089	23. 10	·02800			
		4. 30	·1100	23. 59	·02796			
		4. 40	·1104					
		5. 11	·1106					
		5. 24	·1102					
		5. 45	·1106					
		6. 10	·1112					
			***					
		7. 7	·1113					
		7. 46	·1102					
		8. 0	·1109					
		8. 14	·1101					
		8. 30	·1106					
		8. 42	·1103					
		9. 27	·1106					
		9. 56	·1115					
		10. 8	·1112					
		10. 22	·1117					
		10. 25	·1114					
		11. 15	·1121					
		11. 30	·1142					
		12. 0	·1119					
		12. 43	·1118					
		12. 55	·1123					
		13. 8	·1122					
		13. 25	·1126					
		14. 9	·1120					
			***					
		15. 30	·1124					
		16. 56	·1132					
		17. 25	·1126					
		17. 54	·1124					
		18. 30	·1130					
		18. 45	·1129					
		19. 25	·1134					
		21. 0	·1113					
		21. 55	·1100					
			***					
		22. 45	·1087					
		23. 20	·1101					
		23. 30	·1099					
		23. 45	·1102					
		23. 59	·1098					
Nov.27		Nov.27		Nov.27		Nov.27		
	(†)	0. 0	·1098	0. 0	·02796	1. 0	55·0	55·0
0. 33	21. 34. 0	3. 5	·1096	3. 28	·02600	3. 0	[illegible]	[illegible]
1. 9	34. 30		***	10. 0:	·02207	9. 0	56·0	57·0
1. 44	33. 5	4. 58	·1098	16. 53	·02363	22. 20	53·1	54·8
2. 31	31. 50	5. 14	·1102	23. 59	·02484			
2. 44	32. 30		***					
3. 45	31. 30	6. 30	·1101					
4. 30	27. 50	6. 55	·1108					
	***	7. 16	·1106					
6. 0:	31. 0	7. 50	·1114					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

November 25. The Declination Magnet was in contact with some portion of its apparatus from 12h to 22h; the results therefore are not trustworthy and are omitted.

November 26. The Declination Magnet was in contact with some part of its apparatus: the results therefore are not considered worthy of confidence.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.27		Nov.27						
h m	° ′ ″	h m		h m		h m	°	°
6. 41	21. 26. 30	10. 11	·1120					
6. 52	27. 0	10. 39	·1128					
7. 17	30. 10	10. 54	·1120					
7. 43	28. 25	11. 13	·1130					
8. 0	28. 50	11. 38	·1118					
10. 10	27. 50	12. 25	·1118					
10. 55	23. 20	13. 0	·1124					
11. 22	26. 30	14. 20	·1121					
11. 41	25. 30		***					
12. 0	26. 55	17. 45	·1129					
12. 32	26. 45	18. 15	·1126					
13. 31	29. 35	21. 30	·1124					
13. 50	29. 10	23. 59	·1107					
14. 55	30. 5							
15. 40	28. 30							
16. 9	29. 55							
16. 27	29. 5							
17. 12	29. 55							
21. 14	28. 20							
23. 59	33. 50							
Nov.28		Nov.28		Nov.28		Nov.28		
0. 0	21. 33. 50	0. 0	·1107	0. 0	·02484	8. 25	53 ·2	54 ·5
0. 35	35. 5	1. 45:	·1119	1. 40	·02482	21. 0	52 ·0	52 ·5
1. 5	33. 20	3. 20	·1114	6. 22:	·02378			
2. 2	33. 50	3. 30	·1109	11. 37	·02553			
2. 50	32. 20	3. 44	·1109	16. 29	·02797			
2. 58	32. 30	5. 0:	·1125	21. 6	·02890			
3. 45	30. 20	7. 45	·1126	23. 59	·02852			
4. 36	31. 20	9. 15	·1127					
5. 59	30. 0	10. 42	·1130					
6. 52	30. 20	11. 8	·1128					
7. 59	29. 20	11. 24	·1143					
10. 35	30. 45	11. 38	·1138					
10. 56	29. 50	11. 57	·1143					
11. 29	31. 10	12. 21	·1129					
12. 6:	24. 0		***					
12. 22	24. 30	13. 15	·1126					
12. 50	27. 35		***					
13. 14	26. 50	16. 40	·1132					
14. 0	28. 30	18. 45	·1129					
14. 33	28. 5	21. 30	·1129					
15. 10	29. 20	21. 55	·1154					
	***		***					
18. 21	27. 55	23. 59	·1113					
21. 45	31. 20							
22. 28	33. 20							
	***							
23. 59	33. 45							
Nov.29		Nov.29		Nov.29		Nov.29		
0. 0	21. 33. 45	0. 0	·1113	0. 0	·02852	1. 0	54 ·2	54 ·5
0. 30	33. 30	2. 18	·1111	2. 25	·02620	3. 0	56 ·3	56 ·2
0. 44	33. 50	3. 0	·1106	7. 55:	·02070	9. 0	56 ·2	56 ·5
1. 30	32. 30	5. 0	·1114	12. 30	·02177	21. 0	52 ·0	53 ·0
2. 16	32. 55	6. 55	·1112	22. 25	·02525			
2. 52	31. 45	7. 15	·1116	23. 59	·02554			
5. 16	30. 0	10. 10	·1120					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.29		Nov.29						
h m	° ′ ″	h m		h m		h m	°	°
10. 30	21. 29. 30	15. 15	·1127					
14. 55	30. 30	17. 45	·1128					
16. 40	29. 20	20. 40	·1124					
21. 27	29. 30	21. 45	·1116					
23. 12	33. 10	23. 59	·1115					
23. 59	33. 25							
Nov.30		Nov.30		Nov.30		Nov.30		
0. 0	21. 33. 25	0. 0	·1115	0. 0	·02554	1. 0	53 ·0	53 ·6
0. 49	33. 50	0. 30	·1116	2. 0	·02550	3. 0	54 ·8	54 ·5
1. 13	32. 30		***	6. 22	·02273	9. 0	53 ·7	53 ·0
5. 26	27. 55	1. 6	·1109	11. 45	·02447	21. 0	50 ·0	51 ·0
5. 47	28. 40	2. 0	·1113	15. 30	·02679			
6. 59	27. 30	3. 15	·1110	18. 40	·02766			
7. 52	28. 30	5. 45	·1110	23. 59	·02830			
11. 13	27. 50	6. 47	·1117					
14. 40	30. 0	15. 50	·1134					
15. 30	28. 45	18. 40:	·1136					
18. 15	28. 20	22. 6	·1124					
21. 12	29. 10	23. 59	·1117					
22. 29	33. 5							
23. 59	32. 40							
Dec. 1		Dec. 1		Dec. 1		Dec. 1		
0. 0	21. 32. 40	0. 0	·1117	0. 0	·02830	1. 0	52 ·0	52 ·0
0. 30	32. 30	0. 30	·1119	1. 36	·02776	3. 0	53 ·8	53 ·4
1. 0	33. 20	1. 48	·1121	6. 44:	·02266	9. 0	53 ·0	53 ·0
4. 11	32. 20	2. 45	·1119	9. 2	·02296	21. 0	51 ·8	52 ·0
4. 52	30. 30	3. 55	·1121	12. 12	·02392			
	***	4. 10	·1118	12. 36	·02280			
7. 40	31. 20	5. 7	·1123	14. 10	·02420			
8. 30	11. 35	5. 50	·1122	23. 59	·02360			
9. 4	26. 30		***					
9. 22	27. 20	7. 36	·1113					
9. 52	25. 0	8. 4	·1106					
10. 28	27. 45	8. 35	·1136					
10. 55	27. 30	9. 9	·1100					
11. 10	28. 10	9. 50	·1116					
11. 58	26. 50	11. 12	·1126					
12. 14	23. 50	11. 28	·1123					
12. 41	21. 0	12. 10	·1129					
12. 53	23. 30	13. 8	·1118					
13. 39	26. 30	14. 6	·1127					
13. 52	26. 15	14. 30	·1124					
14. 7	28. 10	14. 44	·1129					
14. 26	24. 35	15. 20	·1126					
14. 36	24. 30		***					
14. 44	26. 30	17. 0	·1128					
15. 24	26. 0	17. 28	·1132					
15. 36	27. 30	18. 15	·1128					
	***		***					
17. 0	27. 30	21. 25	·1127					
17. 50	28. 30	21. 55	·1121					
	***	23. 59	·1111					
21. 12	28. 0							
21. 44	31. 0							
22. 7	30. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature,	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 1								
h m	° ′ ″	h m		h m		h m	°	°
22.45	21.31.30							
23.59	33.15							
Dec. 2		Dec. 2		Dec. 2		Dec. 2		
0. 0	21.33.15	0. 0	·1111	0. 0	·02360	1. 0	54·0	54·3
1.11	33.20	1.35	·1115	1.30	·02260	3. 0	56·0	56·0
1.31	34.20	2.30	·1114	3.54	·01947	9. 0	55·0	55·0
2.42	32.30	4. 9	·1114		·02046	21. 0	47·0	48·0
3.15	32.30	8.31	·1126	8.20	·01937			
4.40	29.55		***	10.24	·02000			
8.50	29.50	9.30	·1121	12.24	·02156			
9.12	28. 0	10. 0	·1120	15.36	·02496			
9.52	28.30	10.14	·1114	19.16	·02977			
10.15	26.10		***		·02940			
10.51	28.30	11.50	·1128	21.11	·02954			
10.56	27.55	13.25	·1131		·02880			
11.31	30.30	15. 0	·1136	22. 0	·02896			
11.44	29.50	19.30	·1132		·02766			
13.44	30.55	20. 0	·1136	23.59	·02763			
15.45	30.30	21.30	·1136					
16.52	29.15		***					
17.11	29.35	23.55	·1138					
17.29	29. 0		(†)					
17.57	30.15							
20.28	29.35							
21.27	29. 0							
22.10	30.20							
23.14	34.35							
23.24	33.30							
23.44	33.40							
23.51	35.30							
23.59	34.30							
Dec. 3		Dec. 3		Dec. 3		Dec. 3		
0. 0	21.34.30		(†)	0. 0	·02763	1. 0	49·0	49·5
	***	0. 7	·1131	1.30	·02715	3. 0	52·0	52·2
0.50	34.30	0.55	·1120	5.43	·01955	9. 0	54·0	54·0
1.15	36. 0	1.29	·1125	11.30	·01892	21. 0	53·0	53·0
2.44	31.30	2. 7	·1118	15.16	·01900			
3.21	32.15	4.36	·1124	16.28	·01877			
4.51	30. 5	6. 0	·1128	18.15	·01897			
6. 7	30. 0	6.16	·1122	23.59	·01937			
6.30	27.10		***					
6.40	27.35	7. 7	·1131					
6.52	26.45		***					
7.10	27.30	8. 3	·1123					
7.21	26.10	9. 0	·1128					
7.40	29.30	15. 0	·1128					
7.59	28.10	15.20	·1135					
8.51	28.30	15.38	·1135					
13.21	29.30	16. 8	·1142					
	***	17. 6	·1129					
14.51	28.40	17.24	·1132					
15.28	32.30	18.15	·1127					
16.31	24.30	18.45	·1128					
17.10	27.30	19.17	·1127					
17.36	27.15	19.54	·1129					
18.21	28.30	21.45	·1126					
	***	23.59	·1114					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 3								
h m	° ′ ″	h m		h m		h m	°	°
21.14	21.28.30							
	***							
23.32	33.35							
23.59	32.50							
Dec. 4		Dec. 4		Dec. 4		Dec. 4		
0. 0	21.32.50	0. 0	·1114	0. 0	·01937	1. 0	54·0	54·0
0.28	33.30	0.42	·1121	1.52	·01967	3. 0	55·0	55·0
4. 0	31.15	4.16	·1120		·02053	9. 0	56·0	56·2
	***	4.20	·1137	7.14	·02018	22.45	51·0	51·[illegible]
5.21	34.45		***	9.22	·02095			
	***	5. 0	·1134	10.26	·02090			
6. 7	31. 0	5.19	·1138	10.55	·02117			
	***	5.30	·1128	11.13	·02023			
6.42	33.15		***	11.17	·02057			
6.57	31.30	6.42	·1132	11.30	·02040			
	***	6.45	·1120		·02012			
7.15	34. 0	6.55	·1128	11.54	·01955			
7.27	33. 0	7. 0	·1123	12.19	·02040			
7.44	34.10	7. 4	·1130	13.51	·01947			
8.11	33.55	7. 8	·1118	14.55	·02017			
8.30	29.20	7.15	·1125	15.13	·01960			
8.36	32.50	7.18	·1114	15.45	·02047			
9. 2	12. 5	7.46	·1111	16.16	·01957			
9.12	18.30	8. 9	·1118	16.25	·02010			
9.15	15. 0	8.22	·1108	16.36	·01940			
9.51	22. 0	8.30	·1096	16.58	·02022			
10. 4	20.45	8.32	·1069	17.42	·01973			
10.22	24. 0	8.44	·1073	18.40	·02120			
10.43	19.50	8.55	·1078	19.15	·02227			
10.51	21. 5	9.10	·1105	22.27	·02615			
11. 1	19.30	9.20	·1080	23.59	·02838			
11.10	8.30	9.30	·1095					
11.45	41. 0	10. 5	·1077					
11.58	12.15	10.15	·1081					
12.28	23.45		***					
12.30	21.30	10.43	·1072					
12.45	21.45	10.53	·1084					
13. 1	18.30	11. 0	·1082					
13.11	19. 5	11.10	·1122					
13.22	17.30	11.16	·1085					
13.40	21.35	11.21	·1114					
13.58	8.45	11.30	·1085					
14.13	13.30	11.47	·1131					
14.24	12.30	12. 5	·1046					
14.42	17. 5	12.24	·1096					
14.51	13.45	12.38	·1081					
15. 7	7.10	12.53	·1087					
15.15	6.30	12.58	·1095					
15.43	22.30	13.11	·1068					
16.12	40.40	13.30	·1080					
16.30	32.30	13.50	·1061					
16.52	38.30	14.10	·1071					
17. 7	41.45	14.21	·1066					
17.22	41.20	14.34	·1075					
17.36	35. 0	14.44	·1071					
18. 0	41.35	14.59	·1095					
18.12	37.50	15.13	·1087					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 4		Dec. 4						
h m	° ′ ″	h m		h m		h m	°	°
18. 23	21. 38. 35	15. 35	·1104					
18. 36	32. 20	15. 50	·1124					
18. 53	48. 40	16. 3	·1129					
19. 0	50. 30	16. 12	·1098					
	***	16. 24	·1118					
20. 11	35. 30	16. 35	·1089					
	***	16. 55	·1112					
21. 11	32. 0	17. 7	·1104					
	***	17. 24	·1098					
21. 53	33. 20	17. 29	·1104					
	***	17. 43	·1086					
22. 40	37. 30	17. 53	·1091					
23. 7	32. 50	18. 10	·1076					
23. 59	30. 20	18. 30	·1094					
		18. 45	·1070					
		19. 2	·1092					
		19. 7	·1086					
		19. 25	·1093					
		19. 30	·1089					
		20. 5	·1104					
			***					
		21. 15	·1085					
		21. 41	·1074					
		22. 15	·1050					
		22. 34	·1064					
		22. 47	·1071					
		23. 59	·1071					
Dec. 5		Dec. 5		Dec. 5		Dec. 5		
0. 0	21. 30. 25	0. 0	·1071	0. 0	·02838	6. 43	50 ·0	51 ·0
0. 38	36. 30	0. 25	·1088	2. 0	·03057	21. 0	44 ·8	46 ·0
0. 45	33. 40	0. 40	·1084	5. 16	·02977			
1. 5	34. 30	1. 46	·1080	9. 37	·02967			
	***	1. 8	·1097	12. 54	·03073			
1. 52	27. 30	1. 15	·1090	18. 0	{·03077 ·02976			
2. 30	28. 35	1. 30	·1090					
2. 44	30. 40	1. 53	·1087	23. 59	·03018			
3. 15	28. 15	2. 16	·1100					
3. 40	30. 40	2. 29	·1097					
3. 50	30. 25	2. 55	·1105					
4. 0	32. 0	3. 14	·1099					
4. 15	30. 55	3. 27	·1105					
4. 53	37. 0		***					
5. 15	45. 30	4. 0	·1105					
5. 28	37. 25	4. 15	·1097					
5. 58	33. 40	4. 53	·1112					
7. 40	31. 45	5. 0	·1109					
7. 54	32. 50	5. 12	·1113					
8. 43	29. 35	5. 28	·1082					
9. 22	31. 50		***					
9. 45	31. 15	6. 12	·1096					
12. 40	34. 55		***					
13. 12	37. 30	6. 45	·1094					
14. 45	33. 30	7. 30:	·1100					
15. 15	34. 5	8. 5	·1096					
15. 46	32. 30	9. 10	·1108					
16. 40	32. 15	9. 30	·1108					
17. 31	33. 20	10. 24	·1114					
18. 10	31. 20	11. 0	·1111					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 5		Dec. 5						
h m	° ′ ″	h m		h m		h m	°	°
19. 24	21. 28. 30	11. 55	·1113					
21. 0	28. 20	12. 8	·1118					
23. 59	31. 0	13. 12	·1110					
			***					
		15. 40	·1116					
		16. 30	·1121					
		17. 30	·1117					
		18. 20	·1120					
		19. 35	·1121					
		21. 4	·1115					
		22. 30:	·1103					
		23. 52	·1105					
			(†)					
Dec. 6		Dec 6.		Dec. 6		Dec. 6		
0. 0	21. 30. 55	0. 0	·1102	0. 0	·03018	1. 0	45 ·0	46 ·5
0. 28	31. 0		***	3. 0	·02953	3. 0	47 ·0	47 ·5
0. 37	32. 0	3. 0	·1109	5. 31:	·02750	21. 0	43 ·8	45 ·0
	***	3. 45	·1112	9. 24	·02672			
2. 24	31. 20	5. 0	·1118	13. 10	·02687			
4. 42	29. 35	5. 53	·1115	17. 44	·02807			
4. 58	28. 30	6. 15	·1119	21. 11	{·02973 ·02920			
6. 30	27. 30	9. 0	·1128					
6. 58	29. 10		***	23. 59	·02955			
7. 21	28. 30	13. 40	·1131					
9. 45	28. 0	17. 25	·1136					
15. 26	31. 30	20. 40	·1136					
19. 45	29. 5	21. 30	·1127					
21. 28	28. 0	22. 25	·1120					
22. 22	28. 20		***					
23. 59	29. 50	23. 59	·1116					
Dec. 7		Dec. 7		Dec. 7		Dec. 7		
0. 0	21. 29. 50	0. 0	·1115	0. 0	·02955	1. 0	45 ·2	46 ·0
1. 21	31. 45	3. 35	·1117	2. 0:	·02847	3. 0	47 ·5	48 ·0
1. 30	31. 0	3. 40	·1113	7. 10:	·02290	9. 0	48 ·0	48 ·5
1. 56	31. 30		***	11. 45	·02177	21. 0	45 ·8	47 ·0
	***	4. 41	·1123	14. 51	·02172			
8. 56	28. 10	5. 0	·1120	21. 49	·02287			
11. 10	28. 45	6. 20	·1126	23. 59	·02098			
13. 7	29. 30	6. 40	·1125					
14. 31	31. 20	8. 4	·1129					
15. 8	30. 0	8. 14	·1126					
15. 31	30. 45	9. 59	·1129					
15. 50	29. 55	14. 14	·1128					
19. 47	29. 30	15. 25	·1132					
21. 26	22. 30	15. 40	·1130					
22. 52	29. 0	19. 45:	·1133					
23. 59	30. 30	23. 0	·1115					
		23. 59	·1114					
Dec. 8		Dec. 8		Dec. 8		Dec. 8		
0. 0	21. 30. 30	0. 0	·1114	0. 0	·02098	1. 0	48 ·0	48 ·0
1. 22	31. 20	1. 15	·1119	1. 5	·02057	3. 0	50 ·0	51 ·0
4. 15	28. 45	4. 20	·1115	3. 12	{·01852 ·01937	9. 0	49 ·0	49 ·8
6. 12	28. 20	6. 14	·1119			21. 0	46 ·0	47 ·2
7. 31	28. 40	6. 24	·1124	7. 43	·01872			
7. 50	27. 10	7. 30	·1122	10. 36	·01869			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 8		Dec. 8		Dec. 8				
h m	° ′ ″	h m		h m		h m	°	°
8. 12	21. 28. 40	7. 45	·1118	14. 44	·01935			
8. 44	27. 40	8. 10	·1120	23. 59	·02244			
13. 10	29. 0	8. 35	·1117					
13. 45	27. 35	9. 20	·1124					
14. 15	29. 30	12. 53	·1128					
14. 43	28. 20	13. 44	·1131					
19. 26	28. 30	15. 15	·1128					
21. 15	27. 0	16. 45	·1132					
23. 59	30. 45	21. 9:	·1131					
		22. 15	·1123					
		22. 55	·1121					
		23. 11	·1125					
		23. 35	·1120					
		23. 59	·1116					
Dec. 9		Dec. 9		Dec. 9		Dec. 9		
0. 0	21. 30. 45	0. 0	·1116	0. 0	·02244	1. 0	48·5	48·8
	***		***	1. 26	·02150	3. 0	50·0	51·0
3. 11	30. 40	3. 15	·1123	3. 45	·01886	9. 18	51·0	51·0
4. 45	28. 30	4. 44	·1119	8. 39	·01330	21. 0	47·0	48·0
8. 0	28. 20	6. 30	·1127	11. 22	·01837			
9. 22	27. 30	7. 16	·1122	21. 30	·02084			
10. 17	28. 40	7. 42	·1125	23. 59	·02246			
11. 11	27. 30	10. 0	·1126					
11. 51	29. 35	11. 0	·1128					
13. 15	30. 15	11. 42	·1136					
20. 39	28. 40	12. 30	·1130					
23. 14	30. 25	15. 10	·1131					
23. 59	29. 20	18. 54	·1140					
		21. 15:	·1138					
		23. 20	·1124					
		23. 59	·1117					
Dec. 10		Dec. 10		Dec. 10		Dec. 10		
0. 0	21. 29. 20	0. 0	·1117	0. 0	·02246	1. 0	48·0	48·3
0. 13	30. 20	0. 14	·1119	2. 20	·02170	3. 0	50·0	51·0
	***	1. 15	·1114	4. 22	·02046 ·02262	9. 0	49·0	49·0
2. 18	31. 30	2. 17	·1120			21. 0	43·5	45·0
2. 30	30. 0	2. 30	·1115	8. 6	·02233			
2. 43	31. 10	3. 5	·1120	10. 30	·02275			
	***	3. 45	·1115	12. 52	·02376			
5. 4	28. 50	4. 0	·1117	19. 37	·02786			
5. 30	30. 30	5. 24	·1113	23. 54	·02942			
5. 52	29. 0	6. 25	·1105		(†)			
6. 28	31. 45	7. 45	·1119					
7. 0	31. 0	8. 7	·1116					
7. 40	27. 40	8. 24	·1120					
7. 52	27. 50	8. 55	·1123					
8. 18	25. 20	9. 57	·1120					
8. 30	23. 45	11. 5	·1126					
8. 49	26. 20	11. 20	·1124					
9. 15	25. 45	12. 25	·1127					
9. 51	26. 30	12. 40	·1131					
10. 18	22. 30	14. 7	·1129					
12. 2	27. 25	17. 28	·1137					
	***	19. 30	·1137					
12. 52	26. 30	23. 44	·1109					
13. 32	27. 40	23. 59	·1112					
13. 54	21. 27. 30							
14. 28	28. 50							
15. 40	27. 55							
16. 32	28. 45							
18. 39	28. 35							
19. 12	30. 0							
21. 33	28. 35							
23. 43	32. 0							
23. 59	33. 40							
Dec. 11		Dec. 11		Dec. 11		Dec. 11		
0. 0	21. 33. 40	0. 0	·1111		(†)	1. 0	46·0	46·0
	***	1. 14	·1112	1. 0	·02093	3. 0	48·0	49·0
1. 49	33. 20	1. 35	·1118	1. 30	·02064	9. 0	46·0	46·0
2. 30	33. 30		***	2. 45	·02058 ·02195	22. 30	44·0	45·0
2. 58	32. 0	4. 45	·1106					
	***	5. 28	·1113	4. 33	·02087			
4. 42	33. 45	6. 7	·1102	6. 45	·02097			
4. 56	32. 0	6. 17	·1103	11. 59	·02030			
5. 27	30. 10	6. 24	·1109	19. 58	·02148			
6. 0	32. 20	6. 45	·1101	23. 59	·02226			
6. 29	27. 30	6. 55	·1109					
6. 35	29. 30	7. 3	·1106					
6. 43	28. 20	7. 47	·1122					
6. 58	28. 30		***					
7. 11	31. 10	10. 2	·1125					
7. 15	30. 30	10. 16	·1118					
7. 44	31. 20	10. 45	·1118					
8. 28	28. 40	11. 8	·1126					
8. 52	29. 10	11. 20	·1137					
9. 57	27. 10	11. 40	·1134					
10. 15	27. 50	11. 59	·1124					
10. 42	28. 30	15. 40	·1128					
11. 10	25. 30	16. 35	·1135					
11. 21	23. 30	19. 30	·1137					
11. 37	23. 40		***					
11. 45	21. 20	21. 54	·1134					
13. 40	27. 50	22. 1	·1127					
14. 10	27. 45	22. 11	·1133					
15. 11	28. 55	23. 9	·1121					
15. 29	30. 5	23. 59	·1127					
16. 13	29. 0							
16. 38	29. 40							
16. 58	29. 10							
	***							
21. 22	28. 30							
	***							
23. 30	33. 40							
23. 59	32. 45							
Dec. 12		Dec. 12		Dec. 12		Dec. 12		
0. 0	21. 32. 45	0. 0	·1127	0. 0	·02226	8. 30	43·0	44·5
0. 11	33. 5	1. 10	·1132	1. 39	·02269	21. 0	43·8	45·0
0. 30	32. 20	1. 30	·1129	2. 30	·02348			
0. 51	33. 55	1. 42	·1122	5. 34	·02422			
1. 32	34. 0	2. 26	·1123	6. 10	·02465			
2. 0	37. 30	2. 40	·1108	11. 11	·02362			
2. 12	36. 45	2. 47	·1111	20. 32	·02347			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 12		Dec. 12		Dec. 12				
h m	° ′ ″	h m		h m		h m	°	°
2. 20	21. 38. 10	3. 14	·1108	23. 59	·02142			
2. 40	30. 30	3. 39	·1123					
	***	3. 46	·1122					
3. 13	30. 30	4. 24	·1126					
3. 43	34. 30	5. 0	·1113					
3. 52	33. 0	5. 20	·1119					
4. 27	33. 30	5. 30	·1106					
4. 42	35. 0	5. 45	·1102					
5. 12	31. 15	6. 15	·1125					
5. 15	31. 20	7. 10	·1118					
5. 37	27. 0	7. 54	·1126					
5. 52	24. 30	8. 3	·1124					
6. 0	26. 30	8. 15	·1128					
6. 13	30. 20	8. 44	·1123					
7. 40	26. 15		***					
7. 53	27. 30	9. 15	·1129					
8. 25	24. 30	9. 30	·1127					
8. 52	25. 10	9. 40	·1129					
9. 4	23. 20	9. 48	·1126					
9. 43	17. 10	10. 30	·1142					
9. 52	18. 20	11. 0	·1130					
10. 8	18. 20		***					
10. 44	28. 5	11. 58	·1129					
11. 17	27. 0	12. 14	·1136					
12. 15	28. 55	12. 38	·1129					
12. 28	30. 40	12. 50	·1136					
12. 50	28. 20	13. 8	·1137					
13. 6	26. 20	13. 23	·1131					
13. 30	28. 40	13. 45	·1137					
13. 55	26. 40		***					
14. 43	31. 20	14. 40	·1133					
15. 29	28. 0	15. 25	·1144					
15. 55	27. 0	16. 26	·1146					
16. 36	32. 20	16. 45	·1139					
17. 11	32. 30	17. 25	·1130					
18. 0:	30. 0	17. 54	·1145					
18. 52	32. 30	18. 45	·1134					
	***	19. 30	·1128					
19. 50	30. 50	19. 53	·1119					
	***		***					
21. 36	31. 40	21. 7	·1123					
	***	21. 55	·1113					
22. 36	33. 45	23. 59	·1118					
	***							
23. 29	33. 30							
23. 59	34. 55							
Dec. 13		Dec. 13		Dec. 13		Dec. 13		
0. 0	21. 34. 55	0. 0	·1118	0. 0	·02142	1. 0	47·0	48·6
0. 35	37. 0	0. 25	·1118	1. 44	{ ·02167	3. 0	49·5	50·4
1. 12	32. 20	0. 53	·1090		·02260	9. 0	51·5	52·0
1. 28	33. 15	1. 25	·1107	2. 29	·02106	21. 0	49·0	50·0
1. 32	36. 0	1. 34	·1102	4. 58	{ ·02120			
1. 45	34. 30	1. 45	·1112		·02254			
1. 57	37. 20	1. 54	·1104	5. 36	·02209			
2. 14	34. 55	2. 5	·1102	6. 44	·02238			
2. 30	36. 30	2. 14	·1107	7. 2	·02187			
2. 54	34. 40	2. 54	·1108	8. 58	·02168			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 13		Dec. 13		Dec. 13				
h m	° ′ ″	h m		h m		h m	°	°
3. 5	21. 35. 30	3. 9	·1101	12. 14	·02176			
3. 28	32. 10		***	17. 57	·02285			
	***	4. 22	·1103	19. 51	·02372			
4. 29	31. 50	4. 36	·1097	23. 18	·02550			
4. 46	28. 30		***		(†)			
5. 0	27. 20	5. 42	·1100	23. 50	·02436			
5. 13	28. 25	5. 55	·1104	23. 59	·02424			
5. 22	27. 40	6. 14	·1091					
5. 35	28. 55	6. 21	·1094					
5. 45	26. 30	6. 31	·1087					
5. 54	26. 45	6. 50	·1115					
6. 13	30. 20	6. 54	·1108					
6. 19	28. 0	7. 0	·1116					
6. 30	30. 5	7. 8	·1114					
6. 42	26. 40	7. 30	·1086					
6. 46	27. 5	7. 40	·1083					
6. 55	21. 50	7. 55	·1114					
6. 58	23. 30	8. 6	·1112					
7. 2	21. 25	8. 22	·1104					
7. 30	31. 55	8. 45	·1112					
8. 0	9. 30		***					
8. 28	25. 30	11. 35	·1113					
8. 40	24. 20	11. 58	·1126					
	***	12. 40	·1115					
9. 56	28. 15		***					
	***	15. 8	·1115					
10. 51	27. 45	15. 55	·1125					
11. 28	25. 30	16. 30	·1122					
11. 48	26. 0	17. 40	·1135					
11. 55	27. 30	18. 0	·1134					
12. 21	25. 30	18. 30	·1120					
12. 40	27. 45	19. 25	·1121					
13. 0	27. 15	19. 51	·1111					
13. 28	29. 30	20. 9	·1117					
13. 46	28. 30		***					
14. 27	30. 15	21. 35	·1104					
14. 44	39. 50	21. 55	·1110					
15. 11	31. 15		***					
15. 52	35. 30	23. 6	·1107					
16. 22	35. 30	23. 50	·1086					
16. 39	36. 20		(†)					
16. 53	32. 50							
17. 10	32. 15							
17. 30	33. 20							
17. 45	32. 45							
18. 52	36. 30							
19. 29	39. 20							
20. 4	33. 15							
	***							
20. 59	32. 45							
21. 34	30. 30							
21. 55	32. 30							
22. 44	33. 0							
23. 8	35. 30							
23. 26	35. 15							
23. 53	40. 0							
23. 59	39. 45							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Dec. 14		Dec. 14		Dec. 14		Dec. 14		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 39. 45	0. 0	·1087	0. 0	·02424	1. 0	50·8	50·8
	***	0. 30	·1100	2. 39	·02487	3. 0	50·[illegible]	51·0
2. 43	32. 30		***	2. 55	·02540	9. 0	50·5	51·0
2. 59	30. 40	1. 31	·1098	4. 22	·02500	21. 0	46·7	47·5
3. 42	28. 30		***	7. 52	·02460			
4. 7	30. 0	2. 15	·1106	12. 17	·02528			
4. 22	29. 15	3. 0	·1107	15. 25	·02540			
4. 49	31. 20	3. 31	·1101	16. 0	·02522			
5. 9	30. 10	4. 25	·1109	19. 30	·02520			
5. 15	30. 15	4. 40	·1106	23. 15	·02546			
5. 25	28. 20	6. 5	·1117	23. 59	·02548			
	***	6. 55	·1117					
6. 55	27. 45	7. 30	·1125					
7. 15	25. 30	8. 15	·1119					
7. 40	25. 30	9. 31	·1127					
8. 4	22. 50	9. 55	·1124					
8. 28	26. 15		***					
8. 43	23. 25	13. 50	·1127					
8. 58	28. 30		***					
9. 24	22. 30	15. 11	·1130					
9. 44	26. 30	15. 39	·1140					
10. 46	29. 10	16. 0	·1135					
11. 16	28. 30		***					
12. 28	29. 45	16. 46	·1135					
14. 0	29. 40	17. 20	·1139					
14. 27	28. 30	17. 46	·1136					
15. 0	28. 20	18. 59	·1140					
15. 18	31. 55	20. 0	·1123					
15. 31	29. 35	23. 45	·1109					
15. 44	29. 40	23. 59	·1119					
16. 10	26. 35							
16. 26	28. 30							
	***							
18. 10	28. 55							
19. 21	31. 20							
19. 52	30. 40							
20. 27	31. 0							
20. 43	30. 0							
	***							
22. 21	32. 45							
	***							
22. 58	31. 20							
23. 13	32. 30							
23. 29	31. 20							
	***							
23. 59	34. 15							
Dec. 15		Dec. 15		Dec. 15		Dec. 15		
0. 0	21. 34. 15	0. 0	·1119	0. 0	·02548	1. 0	48·0	48·5
	***	0. 25	·1113	0. 15	·02540 ·02080	3. 0	49·0	50·0
0. 30	32. 0	2. 35	·1119			9. 0	49·5	49·8
0. 45	31. 30	3. 8	·1097	1. 0	·02065	21. 0	44·8	45·4
1. 22	32. 45	3. 50	·1114	3. 20	·02140			
1. 58	31. 50	4. 40	·1120	9. 0:	·02052			
2. 28	33. 30	5. 6	·1117	14. 0	·02174			
2. 43	32. 45	7. 53	·1128	18. 5	·02409			
2. 52	33. 10		***	23. 59	·02160			
3. 15	26. 30	12. 0	·1128					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Dec. 15		Dec. 15						
h m	° ′ ″	h m		h m		h m	°	°
4. 7	21. 30. 30	15. 45	·1120					
4. 29	29. 30		***					
4. 54	30. 0	17. 31	·1141					
6. 52	27. 30	17. 47	·1136					
7. 22	27. 40	18. 19	·1139					
7. 54	26. 45	18. 39	·1130					
8. 10	27. 30	19. 10	·1129					
8. 19	26. 30	19. 45	·1146					
8. 40	27. 35	20. 40	·1141					
9. 10	26. 20	21. 41	·1127					
9. 28	27. 45	23. 15	·1124					
10. 10	26. 30	23. 59	·1126					
11. 51	28. 30							
16. 7	29. 20							
16. 15	28. 30							
17. 0	28. 30							
17. 28	26. 55							
17. 43	27. 45							
18. 15	27. 20							
19. 16	32. 0							
	***							
20. 30	27. 30							
21. 30	28. 30							
23. 35	32. 30							
23. 59	32. 30							
Dec. 16		Dec. 16		Dec. 16		Dec. 16		
0. 0	21. 32. 30	0. 0	·1126	0. 0	·02160	1. 0	45·[illegible]	45·[illegible]
2. 15	32. 30	0. 30	·1125	1. 40:	·021[illegible]	3. 0	46·[illegible]	46·5
2. 43	31. 0	3. 16	·1133	4. 0	·02141	9. 0	46·6	47·2
3. 42	30. 50	4. 0	·1131	12. 0:	·02108	21. 0	44·[illegible]	45·[illegible]
4. 29	28. 30	5. 8	·1139	23. 59	·02316			
5. 15	28. 30	5. 25	·1136					
5. 31	29. 20	6. 10	·1139					
	***	6. 23	·1135					
7. 22	29. 20	6. 55	·1138					
8. 0	26. 30	7. 39	·1130					
8. 18	28. 20	8. 0	·1136					
8. 43	27. 45	8. 25	·1134					
	***		***					
12. 22	29. 10	9. 50	·1138					
13. 28	28. 20	12. 5	·1138					
17. 12	29. 0	12. 52	·1141					
	***	15. 15	·1142					
21. 0	27. 10	17. 45	·1148					
	***		***					
22. 30	30. 30	19. 50	·1147					
	***		***					
23. 45	31. 0	23. 41	·1127					
23. 52	32. 50	23. 59	·1135					
23. 59	31. 45							
Dec. 17		Dec. 17		Dec. 17		Dec. 17		
0. 0	21. 31. 45	0. 0	·1135	0. 0	·02316	1. 0	[illegible]	[illegible]
4. 28	28. 0	1. 40	·1143	2. 0:	·02260	3. 0	47·[illegible]	[illegible]
	***	4. 33	·1142	3. 16	·02148	9. 0	47·[illegible]	47·[illegible]
7. 29	29. 20	4. 44	·1150	7. 30	·02120	21. 0	47·[illegible]	[illegible]
	***		***	11. 0	·02130			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec.17		Dec.17		Dec.17				
h m	° ′ ″	h m		h m		h m	°	°
10. 28	21. 27. 20	5. 30	·1146	12. 25	·02170			
10. 43	27. 45	6. 23	·1151	22. 30	·02165			
11. 29	27. 20	6. 36	·1146	23. 59	·02190			
11. 40	27. 50	6. 55	·1150					
	***	7. 8	·1145					
12. 47	25. 20	8. 0	·1146					
	***	8. 35	·1150					
13. 56	27. 10		***					
14. 7	29. 0	10. 0	·1150					
14. 25	28. 20	10. 11	·1154					
14. 36	29. 30		***					
14. 53	27. 30	10. 28	·1147					
15. 15	26. 25	10. 38	·1148					
	***	10. 44	·1159					
16. 45	27. 45	10. 52	·1150					
17. 30	31. 40	11. 20	·1150					
18. 11	25. 35	11. 42	·1132					
18. 30	29. 20	12. 0	·1134					
18. 39	27. 0	13. 0:	·1146					
	***		***					
19. 14	29. 40	13. 53	·1141					
19. 22	28. 5	13. 55	·1145					
19. 52	30. 30	14. 2	·1134					
	***	14. 13	·1147					
21. 40	30. 30	14. 30	·1144					
	***	14. 45	·1153					
21. 59	31. 50	14. 59	·1147					
22. 38	37. 20	15. 12	·1150					
23. 15	38. 15	15. 45	·1146					
23. 25	37. 20	15. 57	·1151					
23. 40	38. 0	16. 16	·1145					
23. 59	35. 30	16. 58	·1153					
		18. 0	·1174					
		18. 35	·1148					
		18. 45	·1158					
		19. 10	·1156					
		19. 16	·1150					
		19. 40	·1153					
		20. 10	·1148					
		20. 15	·1151					
		20. 50	·1143					
		21. 9	·1142					
		22. 0	·1133					
		23. 5	·1129					
		23. 25	·1124					
		23. 59	·1129					
Dec.18		Dec.18		Dec.18		Dec.18		
0. 0	21. 35. 30	0. 0	·1129	0. 0	·02190	1. 0	49·0	49·0
0. 39	33. 45	0. 15	·1133	1. 20	·02248	3. 0	50·0	51·0
1. 58	32. 30	3. 6	·1130	11. 15	·02285	9. 0	51·0	52·0
	***	3. 37	·1135	14. 0	·02260	22. 35	51·5	52·0
3. 30	29. 5	4. 6	·1134	17. 7	·02320			
4. 40	28. 5	4. 15	·1138	17. 35	·02295			
6. 21	28. 20	4. 37	·1134	18. 50	·02320			
6. 45	27. 40	4. 44	·1139	22. 10	·02272			
7. 44	28. 40	4. 58	·1135	23. 59	·02296			
9. 22	28. 30	6. 20	·1137					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec.18		Dec.18						
h m	° ′ ″	h m		h m		h m	°	°
9. 52	21. 25. 50	7. 20	·1135					
10. 0	26. 0	7. 55	·1137					
10. 44	23. 10	8. 40:	·1131					
11. 25	29. 0	10. 30	·1133					
11. 42	28. 50	11. 0	·1127					
	***	12. 3	·1131					
12. 27	29. 45	12. 29	·1128					
	***	13. 35	·1137					
12. 52	33. 35	14. 24	·1130					
14. 0	27. 0	16. 0	·1136					
14. 26	26. 45	16. 45	·1131					
14. 42	29. 10	17. 15	·1148					
14. 45	29. 0	17. 32	·1148					
15. 10	30. 55	18. 23	·1130					
15. 44	29. 45	18. 44	·1140					
15. 52	28. 40	19. 30	·1130					
16. 22	28. 0		***					
16. 45	31. 10	20. 55	·1128					
17. 6	35. 30	21. 8	·1122					
17. 30	29. 10	23. 59	·1124					
18. 0	27. 15							
	***							
18. 43	28. 20							
19. 22	27. 20							
19. 40	28. 10							
	***							
21. 10	27. 20							
22. 8	30. 0							
22. 37	33. 30							
22. 50	33. 20							
23. 10	34. 30							
23. 30	32. 50							
23. 43	33. 30							
23. 59	33. 5							
Dec.19		Dec.19		Dec.19		Dec.19		
0. 0	21. 33. 5	0. 0	·1125	0. 0	·02296	8. 0	51·5	52·0
0. 43	33. 30	2. 10	·1131	2. 6	·02270	21. 0	46·0	47·0
1. 7	32. 30	3. 44	·1126	6. 0	·02292			
2. 0	32. 30	6. 6	·1132	9. 45:	·02340			
3. 15	30. 50	7. 10	·1128	15. 14	·02565			
4. 40	31. 10	7. 54	·1133	22. 10:	·02484			
6. 42	29. 30	9. 0	·1131	23. 59	·02480			
7. 11	28. 20	14. 40	·1138					
8. 54	28. 0	17. 0:	·1143					
14. 40	29. 50	20. 30	·1137					
21. 22	28. 10	23. 59	·1136					
22. 40	31. 55							
23. 59	31. 55							
Dec.20		Dec.20		Dec.20		Dec.20		
0. 0	21. 31. 55	0. 0	·1136	0. 0	·02480	1. 0	47·2	47·5
2. 4	31. 45	0. 35	·1136	1. 20:	·02461	3. 0	49·7	50·0
3. 30	30. 40	1. 0	·1132	2. 53	·02250	9. 0	50·0	50·5
5. 0	28. 30	3. 15	·1127	4. 0	·02268	21. 0	47·5	48·2
6. 30	27. 40	6. 14	·1131	9. 30	·02223			
6. 55	28. 35	7. 5	·1125	13. 45	·02340			
7. 44	26. 30		***	19. 0	·02460			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 20		Dec. 20		Dec. 20				
h m	° ′ ″	h m		h m		h m	°	°
8. 0	21. 27. 30	12. 13	·1141	23. 59	·02483			
8. 15	27. 5	12. 23	·1136					
8. 50	27. 50		***					
10. 4	27. 10	18. 14	·1147					
12. 34	30. 0	18. 40	·1145					
	***	19. 50	·1147					
20. 15	29. 5		***					
20. 56	27. 55	21. 25	·1144					
21. 28	30. 40	22. 10	·1138					
	***	22. 40	·1142					
23. 22	33. 15	23. 30	·1132					
23. 40	30. 50	23. 59	·1134					
23. 59	31. 30							
Dec. 21		Dec. 21		Dec. 21		Dec. 21		
0. 0	21. 31. 30		(†)	0. 0	·02483	1. 0	49·7	50·5
0. 27	32. 0	0. 23	·1136	1. 25	·02260	3. 0	52·0	52·5
1. 2	31. 0	2. 51	·1126	3. 40	·02351	9. 0	54·5	54·5
1. 33	31. 40	3. 50	·1129	13. 15	·02326	21. 0	53·0	54·0
1. 45	30. 40	4. 17	·1118	18. 0:	·02350			
3. 12	30. 50	4. 45	·1121	23. 0	·02558			
3. 39	30. 30	5. 25	·1130	23. 59	·02572			
4. 5	31. 0	5. 56	·1128					
4. 27	39. 30	6. 30	·1132					
5. 15	29. 0	7. 46	·1123					
5. 32	30. 30	8. 37:	·1132					
5. 57	29. 15	9. 45	·1127					
6. 29	28. 30	10. 41	·1131					
6. 59	28. 40	11. 8	·1129					
7. 38	27. 45	11. 31	·1138					
8. 2	22. 35	12. 0	·1133					
8. 14	24. 5	13. 11	·1135					
8. 40	22. 30	13. 30	·1131					
9. 15	27. 0		***					
11. 21	26. 40	16. 30	·1131					
11. 43	28. 20	18. 0	·1139					
12. 40	29. 20	19. 38	·1133					
12. 51	30. 50	20. 0	·1134					
	***	20. 30	·1128					
14. 12	27. 40	21. 20	·1127					
14. 29	28. 30		***					
14. 55	28. 30	23. 20	·1113					
15. 21	30. 30	23. 59	·1107					
16. 4	29. 30							
16. 30	26. 30							
16. 52	29. 0							
17. 43	30. 0							
17. 55	29. 10							
18. 28	29. 10							
18. 44	28. 30							
	***							
20. 10	28. 30							
	***							
21. 30	30. 10							
21. 40	29. 0							
	***							
23. 20	33. 20							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 21								
h m	° ′ ″	h m		h m		h m		
23. 51	21. 32. 40							
23. 57	33. 40							
Dec. 22		Dec. 22		Dec. 22		Dec. 22		
	(†)	0. 0	·1107	0. 0	·02572	1. 0	[illegible]	[illegible]
0. 13	21. 31. 45	1. 26	·1110	3. 23	{·026[illegible]	3. 0	[illegible]	55·0
	***	1. 38	·1104		·0275[illegible]	9. 0	53·0	53·0
1. 30	34. 30	1. 50	·1104	7. 10	·02740	21. 0	[illegible]	[illegible]
1. 48	33. 30	2. 10	·1114	8. 30	·02690			
2. 4	35. 30	2. 45	·1109	11. 35	·02622			
3. 26	35. 0		***	12. 10	·02580			
3. 48	33. 45	3. 56	·1107	16. 0	·02610			
3. 57	34. 20	4. 7	·1102	18. 0	·02580			
4. 22	31. 20	4. 31	·1106	23. 59	·02546			
4. 37	32. 0		***					
4. 46	30. 50	5. 29	·1105					
5. 12	30. 0	5. 45	·1110					
5. 18	30. 50	6. 0	·1105					
5. 31	29. 10		***					
	***	6. 52	·1104					
6. 38	29. 5	7. 6	·1098					
7. 0	26. 10	7. 15	·1099					
7. 12	26. 5	7. 30	·1107					
7. 28	22. 40	8. 25	·1119					
7. 36	24. 20	8. 53	·1113					
7. 48	24. 30	9. 23	·1120					
7. 59	26. 30	9. 30	·1113					
8. 15	26. 0	9. 51	·1121					
8. 28	26. 30	10. 14	·1112					
8. 51	25. 40	10. 44	·1117					
9. 15	21. 15		***					
9. 30	24. 30	11. 5	·1126					
9. 51	21. 20	11. 23	·1113					
10. 5	23. 55	12. 0	·1142					
10. 45	20. 30	12. 10	·1142					
11. 10	29. 40	12. 21	·1134					
11. 16	25. 10	12. 37	·1138					
11. 31	29. 45		***					
12. 12	21. 20	13. 30	·1131					
12. 29	19. 45	13. 45	·1136					
13. 52	27. 50	13. 55	·1131					
14. 43	30. 0	15. 0	·1134					
15. 21	28. 0	16. 12	·1144					
16. 10	29. 55		***					
16. 15	28. 50	17. 20	·1135					
16. 30	30. 40	17. 45	·1148					
16. 43	30. 30	18. 54	·1139					
17. 14	37. 25	19. 15	·1145					
17. 30	37. 55	19. 53	·1142					
17. 38	33. 40	20. 39	·1127					
18. 16	33. 20	21. 0	·1128					
18. 33	31. 30		***					
18. 58	30. 25	23. 30	·1106					
19. 0	31. 45	23. 59	·1108					
19. 12	30. 50							
19. 15	32. 30							
19. 43	30. 20							
20. 0	31. 45							
20. 44	30. 50							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Dec. 22	
h m	° ′ ″
21. 0	21. 32. 45
21. 28	31. 20 ***
22. 15	36. 20
22. 40	33. 20
23. 0	33. 55
23. 29	40. 0
23. 45	41. 40
23. 55	40. 30
23. 59	41. 15
Dec. 23	
0. 0	21. 41. 15
0. 25	32. 30 ***
0. 58	32. 30
1. 28	37. 45
1. 58	36. 40
2. 14	33. 15
2. 37	32. 0
2. 45	34. 35 ***
3. 43	35. 0
3. 56	37. 50
4. 12	33. 20
4. 15	33. 45
4. 43	23. 15
4. 50	24. 0
5. 11	32. 30
5. 14	31. 30
5. 25	33. 20
5. 36	31. 30
5. 57	33. 40
6. 12	32. 10
6. 16	32. 35
6. 41	23. 50 ***
6. 52	24. 45
6. 59	27. 45
7. 14	18. 10
7. 29	26. 10
7. 40	25. 10
7. 50	27. 15
8. 10	23. 50
8. 20	26. 30
8. 40	27. 25
9. 0	26. 15
9. 40	27. 30
10. 54	27. 5
11. 28	28. 10 ***
12. 28	22. 0
12. 43	18. 30
13. 0	7. 30
13. 29	22. 15
13. 42	19. 30
13. 48	21. 15
14. 5	13. 30
14. 15	21. 18. 15
14. 45	26. 30 ***
16. 11	28. 40
16. 28	28. 20
16. 40	30. 15 ***
16. 59	29. 30 ***
17. 43	35. 30
18. 25	30. 20 ***
19. 55	29. 0
20. 4	31. 20 ***
20. 44	27. 45 ***
21. 48	29. 20 ***
23. 7	35. 55
23. 12	34. 15 ***
23. 33	39. 30 ***
23. 59	34. 15
Dec. 24	
0. 0	21. 34. 15 ***
0. 29	32. 40
1. 1	32. 40
1. 15	36. 0
1. 43	35. 0
1. 52	41. 0 ***
2. 25	37. 10
2. 30	38. 45
2. 36	37. 30
2. 43	43. 10 ***
2. 58	45. 50
3. 3	44. 30
3. 12	49. 15
3. 21	40. 15
3. 36	49. 30
3. 46	21. 0
3. 55	41. 15
4. 7	19. 30
4. 21	21. 30
4. 27	21. 10
4. 41	26. 30
4. 48	33. 30
4. 54	30. 40
5. 12	35. 40
5. 20	34. 0
5. 30	35. 30
5. 44	32. 30
5. 46	33. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
Dec. 23	
0. 0	·1108
	(†)
2. 47	·1119
3. 10	·1123
4. 2	·1089
4. 14	·1106
4. 20	·1090 ***
4. 50	·1113
5. 2	·1114
5. 10	·1108
5. 42	·1113
6. 0	·1105
6. 12	·1112
6. 30	·1105
6. 41	·1110
7. 1	·1096
7. 15	·1118
7. 21	·1117
7. 29	·1110
7. 39	·1114
7. 51	·1104
8. 13	·1117
9. 7	·1108
9. 40	·1115
11. 22	·1119
12. 15	·1114
12. 40	·1104
12. 50	·1106
13. 6	·1119
13. 18	·1114
13. 30	·1126
13. 45	·1103
14. 0	·1117 ***
16. 25	·1121
16. 40	·1130
17. 7	·1132 ***
17. 51	·1125
18. 9	·1130 ***
21. 25	·1117
21. 41	·1105
22. 25	·1111
23. 0	·1111
23. 16	·1118
23. 44	·1110
23. 59	·1117
Dec. 24	
0. 0	·1117
0. 20	·1122
1. 15	·1125
1. 45	·1113
2. 10	·1084
2. 20	·1082 ***
2. 57	·1130
3. 16	·1120
3. 25	·1141
3. 38	·1115
3. 45	·1155
3. 59	·1104
4. 5	·1118
4. 17	·1094
4. 23	·1100
4. 32	·1088
4. 44	·1093
4. 50	·1082
5. 0	·1089
5. 11	·1082
5. 18	·1085
5. 36	·1080
5. 50	·1081
6. 0	·1088
6. 16	·1083
6. 30	·1095
6. 50	·1065
7. 10	·1094 ***
8. 16	·1104

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Dec. 23	
0. 0	·02546
3. 6	·02380
4. 45	·02439
7. 13	·02408
7. 54	·02360
10. 41	·02357
10. 47	·02460
13. 14	·02510
13. 44	·02456
15. 44	·02632
18. 15	·02590
22. 25	·02560
23. 59	·02588
Dec. 24	
0. 0	·02588
2. 15	·02420 ***
3. 39	·02926
3. 47	·02856
3. 55	·02985
4. 50	·02680 ***
6. 55	·02664
7. 15	·02706
12. 24	·02640
12. 41	·02660
13. 15	·02593
22. 0	·02540
23. 59	·02540

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
Dec. 23		
1. 0	52 ·5	52 ·7
3. 0	54 ·2	54 ·5
9. 0	54 ·0	53 ·8
21. 0	49 ·0	49 ·0
Dec. 24		
1. 0	51 ·0	51 ·
3. 0	53 ·5	53 ·7
9. 0	52 ·5	52 ·2
22. 33	45 ·5	47 ·5

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
Dec.24	
h m	° ′ ″
5. 57	21. 30. 0
6. 12	30. 15
6. 21	37. 30
6. 43	33. 10
7. 6	20. 30
7. 40	26. 40
	***
9. 44	26. 40
10. 30	22. 45
	***
10. 58	24. 30
	***
11. 42	23. 10
11. 55	19. 55
12. 12	15. 35
12. 38	36. 10
12. 58	29. 30
13. 13	28. 45
13. 26	27. 0
13. 31	28. 40
13. 45	25. 45
	***
14. 36	29. 30
14. 51	28. 40
15. 27	30. 30
15. 41	29. 15
16. 10	31. 15
17. 10	30. 40
18. 11	32. 35
18. 51	30. 50
19. 27	30. 45
20. 28	29. 45
	***
21. 52	32. 45
22. 6	30. 40
22. 15	32. 30
22. 30	31. 20
22. 37	33. 30
23. 59	32. 50
Dec.25	
0. 0	21. 32. 50
	***
1. 22	33. 30
	***
2. 32	31. 50
	***
3. 15	31. 30
3. 54	29. 15
4. 30:	25. 10
5. 16	28. 45
7. 42	28. 0
11. 44	28. 0
12. 12	27. 30
13. 15	28. 40
14. 7	27. 55
14. 43	28. 30
14. 55	30. 0
Dec.25	
h m	° ′ ″
15. 58	21. 26. 30
17. 22	25. 40
18. 30	28. 10
	***
21. 27	28. 30
	***
23. 40	32. 20
23. 52	33. 40
23. 59	33. 30
Dec.26	
0. 0	21. 33. 30
	***
0. 40	34. 30
2. 14	33. 15
4. 51	28. 30
5. 4	29. 40
5. 28	29. 40
5. 46	26. 45
6. 0	26. 35
6. 26	28. 40
6. 52	25. 10
7. 45	28. 20
8. 28	27. 45
8. 45	26. 30
9. 0	27. 30
9. 15	26. 30
	***
10. 55	28. 0
11. 7	28. 40
11. 50	28. 20
12. 12	29. 30
21. 28	29. 30
	***
23. 28	33. 0
23. 59	31. 40
Dec.27	
0. 0	21. 31. 40
0. 10	32. 40
0. 13	32. 20
0. 20	33. 40
0. 30	31. 55
2. 15	31. 50
2. 30	32. 30
2. 44	31. 30
5. 17	30. 0
6. 9	28. 40
6. 24	26. 15
7. 0	27. 30
7. 22	26. 40
7. 43	28. 15
	***
11. 44	28. 15
13. 12	28. 45
17. 28	27. 50
18. 12	28. 45
20. 50	27. 50

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Dec.24	
h m	
8. 30	·1102
9. 36	·1108
9. 51	·1104
10. 4	·1108
11. 15	·1110
11. 41	·1099
12. 0	·1096
12. 30	·1131
12. 40	·1126
12. 55	·1132
13. 20	·1124
13. 30	·1127
13. 44	·1117
	***
14. 25	·1125
	***
16. 24	·1127
17. 8	·1136
17. 45	·1135
18. 15	·1140
20. 0	·1134
20. 35	·1136
21. 45	·1124
23. 25	·1118
23. 59	·1122
Dec.25	
0. 0	·1122
1. 0	·1131
2. 2	·1130
3. 45	·1131
4. 9	·1124
5. 0	·1137
	***
14. 40	·1133
14. 59	·1137
16. 25	·1137
18. 27	·1142
21. 30	·1130
23. 59	·1128
Dec.26	
0. 0	·1128
0. 45	·1131
3. 20	·1129
3. 45	·1131
4. 25	·1129
5. 0	·1135
5. 32	·1132
6. 11	·1142
6. 44	·1136
6. 58	·1152
7. 15	·1143
8. 16	·1136
8. 53	·1141
9. 10	·1137
10. 0	·1139
10. 35	·1136
16. 15	·1140
20. 10:	·1142
22. 20	·1130
22. 53	·1128
23. 59	·1126
Dec.27	
0. 0	·1126
0. 21	·1131
1. 30	·1122
4. 30	·1127
4. 50	·1130
6. 18	·1127
7. 30	·1133
	***
12. 25	·1134
20. 30	·1138
22. 40	·1122
23. 59	·1124

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Dec.25	
0. 0	·02520
3. 0	·02560
5. 0	·02522
13. 0:	·02241
20. 45	·02452
23. 59	·02448
Dec.26	
0. 0	·02448
2. 32	·02337
5. 53	·02161
13. 0	·02190
19. 30	·02157
21. 40	·02190
	(†)

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
Dec.25		
6. 15	47 ·0	48 ·5
22. 49	46 ·3	47 ·4
Dec.26		
6. 39	48 ·2	48 ·8
21. 0	47 ·0	47 ·8
Dec.27		
1. 0	47 ·0	
3. 0	49 ·0	
9. 0	48 ·9	
21. 0	46 ·0	

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.
December 27. The Vertical Force Magnet was removed from its box for re-adjustment.

Greenwich Mean Solar Time.	Western Declination.
Dec. 27	
h m	′ ″
23. 0	21. 30. 30
	(†)
Dec. 29	
	(†)
2. 30	21. 31. 15
2. 46	31. 0
3. 10	29. 25
3. 30	30. 10
4. 15	29. 10
5. 15	31. 0
	***
6. 15	28. 0
6. 45	30. 0
7. 0	28. 5
7. 17	30. 40
7. 45	25. 0
8. 8	26. 30
9. 13	26. 0
9. 30	21. 35
10. 0	22. 30
10. 25	27. 0
10. 45	21. 50
	***
12. 7	19. 35
12. 50	24. 30
13. 12	21. 30
13. 37	24. 30
	***
16. 55	27. 0
17. 24	25. 0
18. 22	26. 25
	***
19. 25	26. 30
19. 37	24. 30
19. 48	26. 30
20. 17	25. 0
22. 0	28. 45
	(†)

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
Dec. 28	
0. 0	·1124
1. 15	·1117
9. 45	·1136
10. 15	·1133
	***
12. 30	·1136
14. 10	·1135
19. 15	·1141
20. 27	·1139
21. 45	·1128
23. 59	·1135
Dec. 29	
0. 0	·1133
1. 6	·1142
1. 19	·1137
2. 50	·1145
3. 11	·1142
4. 39	·1146
5. 0	·1139
5. 36	·1141
6. 5	·1135
6. 38	·1132
6. 54	·1135
7. 8	·1131
7. 25	·1116
7. 33	·1116
7. 57	·1124
8. 24	·1122
9. 3	·1127
9. 27	·1119
9. 45	·1126
10. 0	·1126
10. 10	·1132
10. 29	·1120
10. 45	·1125
11. 1	·1118
11. 16	·1122
11. 42	·1139
12. 0	·1129
	***
13. 6	·1127
13. 25	·1131
	***
16. 10	·1138
19. 2	·1138
19. 26	·1145

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Dec. 28		
1. 0	47·0	
3. 0	48·5	
9. 0	48·6	
21. 0	45·0	
Dec. 29		
1. 0	46·0	
3. 0	46·5	
9. 0	46·4	
21. 0	43·0	

Greenwich Mean Solar Time.	Western Declination.
h m	° ′ ″
Dec. 30	
	(†)
1. 30	21. 30. 0
4. 0	27. 15
10. 0	24. 30
11. 55	25. 40
13. 4	23. 30
15. 0	26. 0
16. 57	24. 30
	***
18. 20	25. 35
19. 35	24. 50
	***
22. 35	25. 0
23. 59	27. 0
Dec. 31	
0. 0	21. 27. 0
1. 14	30. 35
3. 6	28. 0
6. 25	23. 0
6. 54	25. 0
7. 45	25. 30
	***
10. 45	22. 55
11. 15	24. 15
12. 10	24. 10
	***
14. 45	24. 0
15. 16	27. 0
15. 50	24. 50
	***
18. 30	25. 0
19. 45	26. 10
21. 12	23. 40
22. 50	27. 0
	(†)

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Dec. 29	
h m	
19. 35	·1142
19. 50	·1148
20. 30	·1148
21. 45	·1138
23. 41	·1134
23. 51	·1129
23. 59	·1130
Dec. 30	
0. 0	·1130
0. 53	·1131
1. 15	·1125
2. 45	·1132
3. 10	·1128
3. 47	·1132
4. 40	·1132
	***
5. 51	·1138
6. 40	·1136
	***
12. 52	·1134
17. 10	·1140
19. 20:	·1145
20. 28	·1142
20. 57	·1137
22. 40	·1130
23. 59	·1116
Dec. 31	
0. 0	·1116
5. 0	·1117
5. 29	·1113
5. 55	·1116
6. 10	·1113
7. 10	·1124
7. 40	·1118
9. 0	·1126
10. 6	·1126
10. 32	·1133
12. 15	·1129
12. 30	·1134
	***
14. 44	·1134
15. 45	·1139
19. 50	·1141
23. 0	·1125
	(†)

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Dec. 30		
1. 0	43·5	
3. 0	45·0	
9. 0	47·2	
21. 14	47·3	
Dec. 31		
1. 0	51·2	
3. 0	53·8	
9. 0	52·7	
21. 12	48·3	

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

December 28. The Declination Magnet was under adjustment.

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

OBSERVATIONS

OF THE

MAGNETIC DIP.

1858.

During the year 1858, the observations of the Magnetic Dip were made generally with the instrument by Robinson used in preceding years, and described in the volume of *Greenwich Magnetical and Meteorological Observations* for 1847, and in preceding volumes. With this instrument are used four nine-inch needles, two of which, marked A and A 2, were made by Barrow, and two, marked A 1 and A 3, were made by Dent. In the tabular statement of the values of the Magnetic Dip these needles are called Barrow A and Barrow A 2, and Dent A 1 and Dent A 3.

In addition to these observations, others were made in the months of February, March, and November with three other instruments, carrying three-inch needles, all of which were made by Barrow.

The first of these was made for Father Secchi of Rome, and its needles are distinguished as Secchi A 1 and Secchi A 2.

The second was intended for employment in the operations connected with the Oregon Boundary Commission, and observations were made with it at this Observatory by Captain Haig, R.A., an officer employed on that service. The needles of this instrument are distinguished as Haig A 1 and Haig A 4.

The third instrument was brought to the Observatory, and observations were made with it, by the Rev. Alfred Weld, of Stonyhurst College. Its needles, for distinction, are called Weld A 1 and Weld A 2.

MAGNETIC DIP, observed at the ROYAL OBSERVATORY, GREENWICH, in the Year 1858.

Day and Approximate Hour, 1858.		Needle.	Magnetic Dip.	Observer.
	d h		° '	
January	14. 0	Barrow A 2	68. 34 ·25	T D
	15. 0	,, ,,	68. 33 ·50	H C
	29. 0	Dent A 1	68. 17 ·50	T D
February	1. 0	Barrow A 2	68. 30 ·75	H C
	3. 23	,, ,,	68. 28 ·50	T D
	8. 21	,, ,,	68. 32 ·75	T D
	11. 22	,, ,,	68. 32 ·25	H C
	15. 22	,, ,,	68. 30 ·25	T D
	16. 22	,, ,,	68. 31 ·25	H C
	17. 21	,, ,,	68. 34 ·25	T D
	17. 22	Secchi A 1	68. 30 ·25	H C
	17. 23	,, A 2	68. 26 ·25	H C
	18. 0	,, ,,	68. 26 ·88	H C
	18. 2	Dent A 1	68. 17 ·25	T D
	18. 22	Secchi A 1	68. 22 ·25	T D
	19. 0	,, A 2	68. 21 ·50	T D
	19. 2	,, ,,	68. 24 ·72	T D
	19. 3	,, ,,	68. 20 ·25	H C
	19. 21	,, A 1	68. 19 ·50	H C
	19. 22	,, A 2	68. 20 ·00	H C
	22. 21	Barrow A 2	68. 28 ·25	H C
	22. 22	,, ,,	68. 33 ·25	T D
	23. 21	,, ,,	68. 32 ·25	T D
	23. 22	Haig A 1	68. 13 ·50	H C
	23. 23	,, A 4	68. 18 ·75	H C
	24. 21	,, A 1	68. 14 ·13	H C
	25. 0	,, ,,	68. 20 ·18	H C
	25. 21	,, A 4	68. 17 ·75	H C
	26. 0	,, A 1	68. 17 ·50	H C
	26. 1	,, A 4	68. 21 ·25	H C
	27. 23	,, A 1	68. 18 ·25	R W H
March	5. 22	Haig A 1	68. 23 ·25	H C
	5. 23	,, A 4	68. 19 ·63	H C
	9. 21	,, A 1	68. 18 ·50	T D
	9. 22	,, A 4	68. 25 ·75	T D
	10. 22	,, ,,	68. 22 ·85	R W H
	23. 0	,, A 1	68. 15 ·75	T D
	23. 21	,, A 4	68. 23 ·25	T D
April	5. 1	Dent A 3	68. 28 ·25	H C
	5. 23	,, ,,	68. 28 ·25	T D
	13. 21	,, ,,	68. 31 ·00	T D
	14. 23	,, ,,	68. 31 ·12	H C
	21. 22	,, ,,	68. 23 ·50	T D
	24. 1	,, A 1	68. 18 ·75	T D
	26. 21	,, ,,	68. 17 ·25	H C
	26. 22	,, A 3	68. 26 ·00	H C
	27. 21	Barrow A 2	68. 29 ·00	H C
	28. 21	Dent A 1	68. 18 ·25	H C
	29. 21	Barrow A 2	68. 27 ·00	H C
	30. 21	Dent A 3	68. 27 ·00	H C
May	3. 21	Dent A 1	68. 14 ·75	T D
	4. 21	Barrow A 2	68. 27 ·00	T D
	5. 21	Dent A 3	68. 26 ·75	T D
May	6. 21	Dent A 1	68. 19 ·75	T D
	7. 21	Barrow A 2	68. 23 ·75	T D
	9. 21	Dent A 3	68. 24 ·25	T D
	10. 21	,, A 1	68. 15 ·82	T D
	11. 21	Barrow A 2	68. 35 ·30	T D
	13. 21	Dent A 3	68. 18 ·53	T D
June	1. 23	Barrow A	68. 21 ·75	T D
	6. 23	,, ,,	68. 26 ·67	H C
	7. 0	,, ,,	68. 25 ·25	H C
	8. 0	Dent A 1	68. 18 ·75	T D
	8. 1	,, ,,	68. 11 ·28	T D
	8. 22	Barrow A 2	68. 36 ·55	H C
	9. 0	,, ,,	68. 35 ·25	H C
	10. 1	Dent A 3	68. 28 ·75	H C
	10. 2	,, ,,	68. 27 ·25	H C
	12. 1	,, A 1	68. 17 ·75	T D
	14. 23	Barrow A 2	68. 36 ·75	T D
	15. 0	,, ,,	68. 27 ·42	T D
	15. 23	Dent A 3	68. 24 ·75	T D
	16. 21	,, ,,	68. 20 ·17	T D
	18. 0	Barrow A	68. 28 ·00	H C
	18. 1	,, ,,	68. 30 ·61	H C
	20. 22	Dent A 3	68. 33 ·50	H C
	20. 23	,, ,,	68. 32 ·10	H C
	22. 0	Barrow A	68. 20 ·75	T D
	22. 1	,, ,,	68. 26 ·82	T D
	22. 23	Dent A 1	68. 18 ·75	T D
	23. 0	,, ,,	68. 20 ·22	T D
	25. 0	,, A 3	68. 30 ·75	T D
	30. 1	Barrow A 2	68. 37 ·50	T D
July	2. 0	Dent A 1	68. 21 ·75	T D
	9. 1	,, ,,	68. 21 ·75	T D
	12. 1	,, A 3	68. 27 ·00	T D
	13. 1	Barrow A 2	68. 40 ·50	T D
	15. 2	Dent A 1	68. 23 ·25	T D
	20. 0	,, A 3	68. 24 ·25	T D
	23. 21	Barrow A	69. 0 ·25	H C
	26. 22	Dent A 1	68. 28 ·25	H C
	29. 21	Barrow A 2	69. 1 ·50	H C
August	5. 0	Dent A 1	68. 22 ·50	T D
	13. 1	,, A 3	68. 26 ·00	T D
	17. 22	Barrow A	69. 4 ·00	H C
	23. 21	Dent A 1	68. 20 ·75	T D
	26. 21	Barrow A 2	68. 26 ·50	H C
	28. 0	Dent A 3	68. 25 ·75	T D
	30. 22	,, A 1	68. 19 ·25	H C
September	1. 23	Barrow A 2	68. 27 ·00	T D
	2. 21	,, A	68. 40 ·50	H C
	6. 21	Dent A 3	68. 31 ·25	H C
	10. 1	Barrow A 2	68. 30 ·25	H C
	10. 21	Dent A 1	68. 20 ·50	H C
	13. 23	,, A 3	68. 26 ·75	T D

The initials T D, H C, R W H, and A W are those of Mr. Downs, Mr. Henry Criswick, Capt. Haig, R.A., and the Rev. Alfred Weld, of Stonyhurst, respectively.

MAGNETIC DIP, observed at the ROYAL OBSERVATORY, GREENWICH, in the Year 1858—*concluded.*

Day and Approximate Hour, 1858.	Needle.	Magnetic Dip.	Observer.	Day and Approximate Hour, 1858.	Needle.	Magnetic Dip.	Observer.
d h		° ′		d h		° ′	
September 24. 0	Dent A 1	68. 20·75	T D	November 11. 23	Weld A 1	68. 19·75	A W
28. 21	Barrow A	68. 48·25	H C	12. 0	,, ,,	68. 19·75	H C
30. 1	Dent A 3	68. 29·50	T D	16. 23	,, ,,	68. 20·50	T D
				17. 22	,, A 2	68. 18·50	H C
October 26. 21	Dent A 1	68. 18·75	T D	24. 22	,, ,,	68. 20·25	A W
30. 0	Barrow A 2	68. 28·00	H C	24. 23	,, ,,	68. 21·25	H C
				25. 0	,, ,,	68. 21·42	H C
November 3. 22	Barrow A	68. 29·00	H C	25. 1	,, ,,	68. 21·42	A W
10. 1	Dent A 3	68. 27·50	T D				
11. 21	Barrow A 2	68. 27·25	T D	December 21. 23	Barrow A	68. 20·75	H C

September 28. A very damp morning.

MONTHLY MEANS of MAGNETIC DIPS, at the ROYAL OBSERVATORY, GREENWICH, in the Year 1858.

1858, Month.	Barrow, A. (9-inch needle.)	Number of Obser-vations.	Dent, A 1. (9-inch needle.)	Number of Obser-vations.	Barrow, A 2. (9-inch needle.)	Number of Obser-vations.	Dent, A 3. (9-inch needle.)	Number of Obser-vations.
	° ′		° ′		° ′		° ′	
January	....	..	68. 17 ·[illegible]	1	68. 33 ·88	2	....	..
February	....	..	....	..	68. 31 ·38	10	....	..
March	....	..	....	..	....	..	....	..
April	....	..	68. 18 ·08	3	68. 28 ·00	2	68. 28 ·06	6
May	....	..	68. 16 ·77	3	68. 30 ·35	3	68. 24 ·13	4
June	68. 25 ·70	7	68. 17 ·35	5	68. 34 ·69	5	68. 28 ·18	[illegible]
July	69. 8 ·38	2	68. 23 ·81	4	68. 51 ·00	2	68. 25 ·63	2
August	69. 4 ·00	1	68. 20 ·83	3	68. 26 ·50	1	68. 25 ·88	2
September	68. 44 ·38	2	68. 20 ·63	2	68. 28 ·63	2	68. 2[illegible] ·17	3
October	....	..	68. 18 ·75	1	68. 28 ·00	1	....	..
November	68. 29 ·00	1	....	..	68. 27 ·25	1	68. 27 ·5[illegible]	1
December	68. 20 ·75	1	....	..	....	..	....	..
Mean	....	..	68. 19 ·22	..	68. 31 ·97	..	68. 26 ·94	..

1858, Month.	Secchi. A 1. (3-inch needle.)	Number of Obser-vations.	Secchi, A 2. (3-inch needle.)	Number of Obser-vations.	Haig, A 1. Weld, A 1. (3-inch needles.)	Number of Obser-vations.	Haig, A 4. Weld, A 2. (3-inch needles.)	Number of Obser-vations.
	° ′		° ′		° ′		° ′	
January	....	..	....	..	....	..	....	..
February	68. 23 ·28	5	68. 22 ·54	5	68. 16 ·71	5	68. 19 ·25	3
March	....	..	....	..	68. 19 ·17	3	68. 22 ·73	4
April	....	..	....	..	....	..	....	..
May	....	..	....	..	....	..	....	..
June	....	..	....	..	....	..	....	..
July	....	..	....	..	....	..	....	..
August	....	..	....	..	....	..	....	..
September	....	..	....	..	....	..	....	..
October	....	..	....	..	....	..	....	..
November	....	..	....	..	68. 20 ·00	3	68. 20 ·57	3
December	....	..	....	..	....	..	....	..
Mean	....	..	....	..	....	..	....	..

As there appeared to be no certain difference between observations taken at 21ʰ and 3ʰ, the monthly means have been taken irrespectively of the hours of observation.

ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS
OF
DEFLEXION OF A MAGNET
FOR
ABSOLUTE MEASURE
OF
HORIZONTAL FORCE.

1858.

The Apparatus used for observation of the Deflexion of a Magnet is described, and the method of computing the results is explained, in the *Greenwich Magnetical and Meteorological Observations*, 1847, Introduction, page xlv, and in the preceding Volume for 1846. The Magnet marked $\frac{\mathrm{D}}{\mathrm{X}}$—(the same which was used from September 1845), has been employed to produce the deflexion of another magnet, marked $\frac{\mathrm{H}}{23}$ (of nearly the same dimensions): and the vibrations then observed are those of $\frac{\mathrm{D}}{\mathrm{XX}}$.

The weight of $\frac{\mathrm{D}}{\mathrm{XX}}$ is 507·302 grains, or 32·873 grammes.

The length of $\frac{\mathrm{D}}{\mathrm{XX}}$ is 0·3025 foot, or 92·198 millimètres.

The diameter of $\frac{\mathrm{D}}{\mathrm{XX}}$ is 0·025 foot, or 7·620 millimètres.

Its moment of inertia, therefore, (using the English grain and foot as the units of weight and measure,) is 3·88826.

The weight of the embracing frame and mirror is 108·242 grains, or 7·014 grammes; and, on examining the distribution of this weight, it was thought probable that its moment of inertia would be nearly the same as if it were uniformly distributed over the mirror, whose horizontal length is 0·0658 foot; its moment of inertia is therefore 0·03905.

The weight of the suspending stalk with a pulley is 39·377 grains, or 2·552 grammes, and its moment of inertia (estimated as probably the same as if it had been condensed on the pulley whose diameter is 0·0233 foot), is 0·00135.

The following is the explanation of the notation used:—

$m =$ the magnetic moment of the deflecting magnet $\frac{\mathrm{D}}{\mathrm{XX}}$.

$X =$ the absolute measure of horizontal magnetic force.

$K =$ the moment of inertia of $\frac{\mathrm{D}}{\mathrm{XX}}$ with its stirrup and pulley as suspended for vibration $= 3{\cdot}92866$, using the English foot and grain as the unit of length and weight.

π the circumference of circle to diameter 1.

T the time of vibration in seconds of mean solar time.

Then when the natural sine of the observed deflexion (the Deflecting Magnet being in the Lateral Position) is expressed by the formula

$$\frac{a}{(\text{distance})^3} + \frac{b}{(\text{distance})^5}$$

we have for the formulæ of computation

$$\frac{m}{X} = \tfrac{1}{2}\,a$$

$$m\,X = \frac{\pi^2\,K}{T^2}$$

from which m and X are found.

The computation of the values of m and X has, in preceding years, been made in English measure only, using the foot and the grain as the units of length and weight; but, for comparison with foreign observations of the Absolute Intensity of Magnetism, it is desirable that X should be expressed also in French measure, in terms of the millimètre and milligramme. If an English foot be supposed equal to α times the millimètre, and a grain be equal to β times the milligramme, then it is plain that, for the reduction of $\frac{m}{X}$ and $m\ X$ to French measure, these must be multiplied by α^3 and $\alpha^2\beta$ respectively. Hence, X^2 must be multiplied by $\frac{\beta}{\alpha}$, and X by $\sqrt{\frac{\beta}{\alpha}}$. Assuming that the mètre is equal to 39·37079 inches, and the gramme equal to 15·432349 grains, $\log.\sqrt{\frac{\beta}{\alpha}}$ will be found to be $= 9{\cdot}6637805$, and the factors for reducing the English values of X to French measures will be 0·46108, or $\frac{1}{2{\cdot}1689}$. The values of X in French measure thus derived from those in English measure are given in the proper table.

The natural sine of the observed deflexion, when the Deflecting Magnet is in the Axial Position, is treated in the same manner as the former, for expressing it by the formula

$$\frac{a^1}{(\text{distance})} + \frac{b^1}{(\text{distance})^5}$$

but no further use is made of these deflexions.

For the determination of the Absolute Measure of Horizontal Force on those days on which vibrations, unaccompanied by Deflexions, were observed, it is assumed that the quantity m (which is peculiar to the magnet) changes at a uniform rate from one observation of deflexion to the next; and the comparison of its interpolated value with the value of $m\ X$ given by the vibration determines the value of X.

ABSTRACT of the OBSERVATIONS of DEFLEXION of a MAGNET for ABSOLUTE MEASURE of HORIZONTAL FORCE.

Month and Day, 1858.	Position of Deflecting Magnet with regard to Suspended Magnet.	Distances of Centers of Magnets.	Temperature.	Observed Deflexion.	Mean of the Times of Vibration of Deflecting Magnet.	Number of Vibrations.	Temperature.	Observer.
		ft. in.	°	° ′ ″	s		°	
January 14	Lateral	1. 0	38·6	8. 38. 0·77	5·839	100	33·7	H C
	Axial............			4. 35. 15·24				
	Lateral	1. 6		2. 36. 34·95				
	Axial............			1. 20. 39·27	5·844	100	41·0	
February 8	Lateral	1. 0	36·4	8. 35. 29·50	5·853	100	32·3	H C
	Axial............			4. 36. 17·62				
	Lateral	1. 6		2. 35. 31·49				
	Axial............			1. 21. 23·54	5·829	100	38·5	
March 26	Lateral	1. 0	48·5	8. 34. 59·45	5·829	100	44·5	H C
	Axial............			4. 36. 33·82				
	Lateral	1. 6		2. 35. 51·10				
	Axial............			1. 21. 3·61	5·840	100	53·7	
April 12	Lateral	1. 0	42·4	8. 35. 23·02	5·832	100	42·5	H C
	Axial............			4. 34. 41·46				
	Lateral	1. 6		2. 36. 27·94				
	Axial............			1. 20. 41·38	5·847	100	42·0	
May 29	Lateral	1. 0	70·2	8. 30. 11·19	5·848	100	68·0	H C
	Axial............			4. 32. 56·73				
	Lateral	1. 6		2. 36. 21·47				
	Axial............			1. 20. 4·41	5·802	100	71·0	
June 16	Lateral	1. 0	90·1	8. 18. 48·31	5·854	100	86·0	H C
	Axial............			4. 25. 13·57				
	Lateral	1. 6		2. 29. 13·62				
	Axial............			1. 16. 52·04	5·952	104	92·0	
July 17	Lateral	1. 0	77·0	8. 6. 39·30	5·950	100	70·7	H C
	Axial............			4. 28. 53·63				
	Lateral	1. 6		2. 29. 47·76				
	Axial............			1. 15. 19·14	5·982	100	78·0	
August 24	Lateral	1. 0	73·9	8. 7. 19·32	5·946	100	72·0	H C
	Axial............			4. 23. 46·22				
	Lateral	1. 6		2. 28. 17·70				
	Axial............			1. 15. 43·83	5·946	100	76·0	
Sept. 13	Lateral	1. 0	82·0	8. 9. 37·74	5·892	100	76·5	H C
	Axial............			4. 24. 5·21				
	Lateral	1. 6		2. 28. 34·15				
	Axial............			1. 16. 21·21	5·960	100	82·5	
October 21	Lateral	1. 0	59·2	8. 10. 36·56	5·915	100	57·0	H C
	Axial............			4. 27. 38·16				
	Lateral	1. 6		2. 30. 36·26				
	Axial............			1. 17. 40·20	5·938	100	58·2	
November 3	Lateral	1. 0	51·1	8. 11. 8·45	5·947	100	46·0	H C
	Axial............			4. 26. 18·02				
	Lateral	1. 6		2. 28. 31·16				
	Axial............			1. 14. 34·86	5·950	100	53·8	
December 31	Lateral	1. 0	42·8	8. 2. 49·27	5·935	100	41·5	H C
	Axial............			4. 24. 55·00				
	Lateral	1. 6		2. 31. 22·42				
	Axial............			1. 17. 57·27	5·940	100	43·6	

The lengths of 1 foot and 1 foot 6 inches answer to 304·8 and 457·2 millimètres respectively.
The initials H C are those of Mr. Henry Criswick.

COMPUTATION of the VALUES of ABSOLUTE MEASURE of HORIZONTAL FORCE.

Month and Day, 1858.	In English Measure.										Value of X. In French Measure.
	Apparent Value of *a*.	Apparent Value of *b*.	Apparent Value of a^1.	Apparent Value of b^1.	Adopted Value of *a*, assuming the Value of *b* (−0·00793) as applicable to all.	Log. $\frac{1}{2}a$ = Log. $\frac{m}{X}$	Adopted Time of Vibration of Deflecting Magnet.	Log *m X*.	Value of *X*.	Value of *m*.	
January 14	+0·15652	−0·00641	0·07853	0·00145	+0·15782	8·89713	5$^{\mathrm{s}}$·842	0·05542	3·794	0·299	1·749
February 8	+0·15523	−0·00584	0·07959	0·00069	+0·15703	8·89496	5·816	0·05929	3·821	0·300	1·762
March 26	+0·15592	−0·00667	0·07894	0·00142	+0·15700	8·89485	5·835	0·05646	3·809	0·299	1·756
April 12	+0·15692	−0·00756	0·07871	0·00111	+0·15722	8·89547	5·840	0·05571	3·803	0·299	1·753
May 29	+0·15792	−0·01006	0·07805	0·00126	+0·15604	8·89220	5·825	0·05795	3·827	0·299	1·765
June 16	+0·14795	−0·00336	0·07416	0·00292	+0·15201	8·88084	5·903	0·04639	3·826	0·291	1·765
July 17	+0·15106	−0·00911	0·07059	0·00755	+0·15001	8·87508	5·966	0·03717	3·811	0·286	1·757
August 24	+0·14897	−0·00771	0·07249	0·00416	+0·14913	8·87255	5·946	0·04009	3·835	0·286	1·768
September 13	+0·14888	−0·00690	0·07353	0·00321	+0·14975	8·87434	5·926	0·04302	3·840	0·288	1·771
October 21	+0·15227	−0·01004	0·07644	−0·00044	+0·15041	8·87624	5·926	0·04302	3·832	0·288	1·767
November 3	+0·14847	−0·00609	0·06987	0·00752	+0·15005	8·87521	5·949	0·03965	3·821	0·287	1·762
December 31	+0·15543	−0·01544	0·07615	0·00084	+0·14885	8·87171	5·938	0·04126	3·844	0·286	1·773
	Mean -	−0·00793									

VALUES of ABSOLUTE MEASURE of HORIZONTAL FORCE, from OBSERVATIONS of VIBRATION of the DEFLECTING MAGNET $\frac{D}{XX}$, unaccompanied by DEFLEXION.

Month and Day, 1858.		Adopted Time of Vibration.	Temperature.	Log. *m X*. In English Measure.	Value of *m* interpolated from the Deflexion Observations. In English Measure.	Inferred Value of *X*. In English Measure.	Value of *X*. In French Measure.	Observer.
January	27	5$^{\mathrm{s}}$·814	40·2	0·05959	0·299	3·836	1·768	N
February	5	5·830	51·6	0·05720	0·300	3·803	1·753	N
	15	5·833	41·2	0·05676	0·300	3·799	1·751	N
March	18	5·830	54·2	0·05720	0·299	3·815	1·759	N
	25	5·826	46·0	0·05780	0·299	3·821	1·762	N
	29	5·815	61·0	0·05944	0·299	3·835	1·768	N
April	22	5·847	66·0	0·05467	0·299	3·793	1·748	E J H
	27	5·830	48·2	0·05720	0·299	3·815	1·759	E J H
	29	5·834	52·0	0·05660	0·299	3·810	1·756	E J H
May	1	5·828	48·0	0·05750	0·299	3·818	1·760	E J H
	8	5·863	54·0	0·05230	0·299	3·773	1·739	E J H
	26	5·847	56·0	0·05467	0·299	3·793	1·748	E J H
June	3	5·833	80·0	0·05676	0·296	3·850	1·775	E J H
	10	5·853	76·7	0·05378	0·294	3·850	1·775	E J H
July	7	5·937	58·2	0·04141	0·288	3·820	1·761	N
	29	5·933	64·5	0·04199	0·286	3·852	1·776	N
September	9	5·940	63·6	0·04097	0·287	3·829	1·765	N
	27	5·960	66·2	0·03805	0·288	3·790	1·747	N
October	12	5·944	48·7	0·04038	0·288	3·811	1·756	N
November	2	5·935	46·3	0·04170	0·287	3·835	1·768	N
	12	5·941	38·0	0·04082	0·287	3·828	1·765	N
	22	5·928	40·5	0·04272	0·287	3·845	1·773	N
December	3	5·950	48·3	0·03951	0·286	3·830	1·766	N
	20	5·957	45·5	0·03848	0·286	3·821	1·762	N
	28	5·929	43·0	0·04253	0·286	3·857	1·778	N

The number of vibrations employed in each determination was 100.

The initials N and E J H are those of Mr. Nash and Mr. E. J. Hallam.

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

METEOROLOGICAL OBSERVATIONS.

1858.

The day in the first column of the following tables is to be understood, generally, as defined in civil reckoning.

The barometer is described in the *Greenwich Magnetical and Meteorological Observations*, 1847, Introduction, page xlviii, and in the corresponding parts of several preceding volumes. The barometer has been read at 21^h, 0^h, 3^h, 9^h (Astronomical), on every day, excepting on Sundays, and on Good Friday and Christmas Day, on which days fewer observations have been taken. Every reading has been reduced to the reading which would have been obtained at the temperature 32° of the mercury and scale, by application of the correction given in table II. (pages 82 to 87) of the Report of the Committee of Physics of the Royal Society. The mean of the reduced readings has then been taken for each civil day, and finally converted into mean daily reading, by application of the correction inferred from Mr. Glaisher's paper in the *Philosophical Transactions*, 1848, part I.

The positions of all the thermometers are described in the Introduction, 1847, page lxix.

The thermometers used for determining the highest temperature of the air, and the highest state of the wet-bulb thermometer, are mercurial thermometers invented by Messrs. Negretti and Zambra, and described in the *Results of Meteorological Observations*, 1851, Introduction, page (xcvi); and those for the lowest are of Rutherford's construction, described in the Introduction, 1847, page lxvii: they are self-registering. The readings given are corrected for index-errors.

The dry-bulb and wet-bulb thermometers are described in the Introduction, 1847, page xlix; their scales have been verified from time to time, in the manner there described.

A mean daily reading of the dry thermometer is inferred from the mean of observations taken at the same hours as the observations of the barometer, corrected by a quantity given in the *Phil. Trans.*, 1848, part I. Another mean daily reading is inferred from the mean of the maximum and minimum thermometers, also corrected by a small quantity given in the same paper. The mean daily value given in the tables is found by combining these two corrected means, giving them weights proportional to the number of observations from which they are respectively derived.

The dew-point has been inferred exclusively from simultaneous observations of the dry-bulb and wet-bulb thermometers. In order to find the difference between the dry-bulb reading and the dew-point, the difference between the dry-bulb and the wet-bulb readings has been multiplied by a factor taken from the following table (deduced by Mr. Glaisher from the comparison of all the simultaneous readings of the dry-bulb, wet-bulb, and dew-point thermometers, from the year 1840 to the end of the year 1854).

TABLE OF FACTORS, BY WHICH THE DIFFERENCE OF READINGS OF THE DRY-BULB AND WET-BULB THERMOMETERS IS TO BE MULTIPLIED, IN ORDER TO PRODUCE THE DIFFERENCE BETWEEN THE READINGS OF THE DRY-BULB AND DEW-POINT THERMOMETERS.

Reading of the Dry-bulb Thermometer.	Factor.	Reading of the Dry-bulb Thermometer.	Factor.	Reading of the Dry-bulb Thermometer.	Factor.	Reading of the Dry-bulb Thermometer.	Factor.	Reading of the Dry-bulb Thermometer.	Factor.	Reading of the Dry-bulb Thermometer.	Factor.
°		°		°		°		°		°	
20	8·1	32	3·3	44	2·2	56	2·0	68	1·8	80	1·7
21	7·9	33	3·0	45	2·2	57	1·9	69	1·8	81	1·7
22	7·6	34	2·8	46	2·1	58	1·9	70	1·8	82	1·7
23	7·3	35	2·6	47	2·1	59	1·9	71	1·8	83	1·7
24	6·9	36	2·5	48	2·1	60	1·9	72	1·8	84	1·7
25	6·5	37	2·4	49	2·1	61	1·9	73	1·8	85	1·7
26	6·1	38	2·4	50	2·1	62	1·9	74	1·7	86	1·7
27	5·6	39	2·3	51	2·0	63	1·9	75	1·7	87	1·6
28	5·1	40	2·3	52	2·0	64	1·9	76	1·7	88	1·6
29	4·6	41	2·3	53	2·0	65	1·8	77	1·7	89	1·6
30	4·2	42	2·2	54	2·0	66	1·8	78	1·7	90	1·6
31	3·7	43	2·2	55	2·0	67	1·8	79	1·7		

The dew-point being thus found for each individual observation, the mean is taken for each day (as defined from midnight to midnight), and this mean is corrected by application of the elements in the *Phil. Trans.*, 1848, part I.

The thermometers exhibiting the lowest temperature on the grass, and the highest and lowest temperatures of the water of the Thames, are described in the Introduction, 1847, pages lxix and lxxi. They are occasionally verified. They are read at 21^h (9^h A.M.) every day; their readings are placed opposite to the day preceding the civil day on which the scales are actually read. The thermometer for the highest temperature in the sunshine is a mercurial thermometer with blackened bulb, of Negretti and Zambra's construction: it is read at 9^h P.M. every evening.

The thermometer for the minimum temperature on the grass was out of order on January 12, 13, 21; February 8, 22; March 1, 2, 3, 21, 23; April 9, 10, 15, 16, 17; May 4, 9, 14, 21, 23, 29; June 7, 9, 23, 24, 26; July 9, 17, 30; August 3, 24, 25; October 22; November 1.

The thermometer for the maximum temperature in the sun was out of order on February 19; March 7; August 3.

The thermometer for the maximum temperature of the water of the Thames was out of order on August 29, 30, 31; October 29, 31; from November 1 to 6; that for the minimum was out of order on August 29, 30, 31; from October 29 to November 6.

The mean daily value of the difference between dew-point temperature and air-temperature is the difference between the two numbers in the sixth and seventh columns. The Greatest and Least are the greatest and least among the differences corresponding to the times of observation in the civil day, or they are found from the absolute maxima and minima, as determined by comparing the observations of the self-registering wet-bulb thermometers with those of the self-registering dry-bulb thermometers.

The difference between the mean temperature for the day and the mean for the same day of the year on an average of forty-three years, is found by comparison with a table of results deduced by Mr. Glaisher from forty-three years' observations, made at the Royal Observatory, ending 1856.

Osler's Anemometer is described in the Introduction, 1847, page lxxi. Little explanation of the results deduced from it appears to be necessary. It may be understood generally that the greatest pressure occurred in gusts of short duration.

Whewell's Anemometer is described in the Introduction, 1847, page lxxii. The amount of movement of air here exhibited is to be understood as from 22^h to 22^h (10^h A.M. to 10^h A.M.), the numbers being placed opposite to the day preceding the civil day on which the instrument is read.

The register of rain is read at 9^h P.M. from Crosley's Rain-gauge, described in page lxxv of the Introduction, 1847. If, however, there appears to be any doubt as to the correctness of the results, reference is made to the Rain-gauge No. 2, described in the same place.

For understanding the divisions of time under the heads of Electricity and Weather, the following remarks are necessary:—The day is divided by columns into two parts (from midnight to noon, and from noon to midnight), and each of these parts is roughly subdivided into two or three parts by colons (:). Thus, when there is a single colon in the first column, it denotes that the remarks before it apply (roughly) to the interval from midnight to 6 A.M., and those following it to the interval from 6 A.M. to noon. When there are two colons in the first column, it is to be understood that the twelve hours are divided into three nearly equal parts of four hours each. And similarly for the second column.

The Electrical Apparatus is described in page lxxvii of the Introduction, 1847. The following is the explanation of the notation employed, it being premised that the quality of the Electricity is always to be supposed positive when no indication of quality is given:—

g cur.	denotes	*galvanic currents*	N	denotes	*negative*	s	denotes	*strong*	v	denotes	*variable*
m	..	*moderate*	P	..	*positive*	sp	..	*sparks*	w	..	*weak*

The duplication of the letter denotes an intensity of the modification described: thus, s s is very strong; v v, very variable.

The Clouds and Weather are described generally by Howard's Nomenclature; the figure denotes the proportion of sky covered by clouds, the whole sky being represented by 10. The notation is as follows:—

a	denotes	*aurora borealis*	hl	denotes	*hail*	shs-r	denotes	*showers of rain*	h-sqs	denotes	*heavy squalls*
ci	..	*cirrus*	so-ha	..	*solar halo*	c-r	..	*continued rain*	fr-h-sqs	..	*frequent heavy squalls*
ci-cu	..	*cirro-cumulus*	l	..	*lightning*	c-h-r	..	*continued heavy rain*	sc	..	*scud*
ci-s	..	*cirro-stratus*	li-cl	..	*light clouds*	m-r		*misty rain*	li-sc	..	*light scud*
cu	..	*cumulus*	lu-co	..	*lunar corona*	fr-m-r	..	*frequent misty rain*	sl	..	*sleet*
cu-s	..	*cumulo-stratus*	lu-ha	..	*lunar halo*	sl-r	..	*slight rain*	sn	..	*snow*
d	..	*dew*	m	..	*meteor*	h-shs	..	*heavy showers*	sl-sn	..	*slight snow*
h-d	..	*heavy dew*	ms	..	*meteors*	fr-shs	..	*frequent showers*	s	..	*stratus*
f	..	*fog*	n	..	*nimbus*	fr-h-shs	.	*frequent heavy showers*	t	..	*thunder*
th-f	..	*thick-fog*	r	..	*rain*	li-shs	..	*light showers*	t-s	..	*thunder storm*
fr	..	*frost*	th-r	..	*thin rain*	oc-shs	..	*occasional showers*	v	..	*variable*
gt-glm		*great gloom*	oc-r	..	*occasional rain*	sq	..	*squall*	w	..	*wind*
h-fr	..	*hoar frost*	fr-r	..	*frozen rain*	sqs	..	*squalls*	st-w	..	*strong wind*
h	..	*haze*	h-r	..	*heavy rain*	fr-sqs	..	*frequent squalls*			

The foot notes show the means and extremes of readings, and their departure in each month from average values, as found from the preceding Seventeen Years' Observations; those relating to Humidity have been calculated from the Second Edition of Glaisher's Hygrometrical Tables.

MONTH and DAY, 1858.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shewn by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	WIND AS DEDUCED FROM ANEMOMETERS. OSLER'S. General Direction. A.M.	General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 24 Obs.	WHEWELL'S. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches read at 9h P.M.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
Jan. 1	..	30·344	48·0	31·6	40·0	38·7	53·5	28·8	44·8	43·2	1·3	4·2	0·0	+ 3·5	SE ; S	Calm	0·0	0·0	0·0	30	0·00
2	..	30·314	44·4	33·7	40·4	38·8	45·5	30·0	44·3	42·8	1·6	4·0	0·0	+ 4·0	Calm	Calm	0·0	0·0	0·0	10	0·00
3	..	30·380	42·2	32·0	35·5	32·3	41·0	26·5	44·3	43·1	3·2	4·8	2·1	− 0·9	SW	SE	0·0	0·0	0·0	65	0·00
4	..	30·325	36·6	27·1	30·8	27·4	42·2	21·6	43·5	43·0	3·4	4·9	0·5	− 5·5	SE	NE	0·0	0·0	0·0	80	0·00
5	In Equator	30·177	29·0	25·2	27·6	25·5	30·3	15·0	42·5	41·9	2·1	3·1	0·5	− 8·5	NE	NE	1·5	0·0	0·0	85	0·00
6	..	30·068	29·8	20·9	25·4	22·0	30·0	13·0	40·3	39·7	3·4	5·9	2·3	−10·6	Calm	S	0·0	0·0	0·0	80	0·00
7	Last Qr.	30·090	38·0	23·8	31·2	27·4	38·2	15·0	40·3	39·7	3·8	7·0	2·1	− 4·6	S	S ; SW	1·0	0·0	0·0	105	0·00
8	..	30·018	50·4	33·1	44·6	43·5	50·4	23·0	39·1	38·6	1·1	2·9	1·1	+ 9·1	SW	SW	2·0	0·0	0·2	225	0·10
9	..	29·978	51·9	41·5	46·0	43·7	52·0	44·0	42·1	40·5	2·3	3·6	0·0	+10·6	SW	W	3·5	0·0	0·8	225	0·00
10	Apogee	30·093	50·9	37·7	46·4	43·1	53·0	29·0	38·8	38·3	3·3	5·5	0·0	+10·7	SW	SW	3·3	0·0	0·5	240	0·06
11	..	30·101	49·2	34·9	41·9	38·4	51·0	33·9	40·3	39·7	3·5	9·1	0·0	+ 6·3	SW	NW	2·5	0·0	0·3	80	0·09
12	..	30·376	46·0	29·4	38·0	32·5	50·7	..	40·3	39·7	5·5	7·9	3·8	+ 2·4	SW	SW	0·0	0·0	0·0	175	0·00
13	Greatest Declination S.	30·159	46·3	32·3	39·7	35·9	44·7	..	40·3	39·7	3·8	6·8	1·8	+ 4·1	SW	NW ; Calm	0·0	0·0	0·0	25	0·00
14	..	30·233	43·2	30·4	35·3	34·3	43·5	21·6	40·3	39·7	1·0	3·0	0·0	− 0·3	SW	SW	0·0	0·0	0·0	80	0·00
15	New	30·216	42·0	31·5	36·5	35·0	42·0	25·2	40·3	39·7	1·5	2·2	0·0	+ 1·0	SW	WSW	0·0	0·0	0·0	130	0·00
16	..	30·287	49·0	33·8	40·6	37·1	50·0	30·0	40·3	38·8	3·5	5·5	1·8	+ 5·1	SW	N	0·0	0·0	0·0	65	0·00
17	..	30·530	38·0	33·0	34·6	26·9	38·2	27·0	39·3	38·8	7·7	8·2	2·6	− 1·3	N	WSW	0·0	0·0	0·0	85	0·00
18	..	30·306	45·5	31·6	38·3	36·3	49·2	22·7	39·3	38·8	2·0	4·8	1·2	+ 2·0	SW	SW	0·0	0·0	0·0	120	0·00
19	..	30·154	47·0	36·3	41·6	37·9	48·5	30·2	39·1	37·3	3·7	7·4	1·2	+ 5·1	SW	WSW	3·5	0·0	0·3	245	0·00
20	In Equator	29·753	50·0	38·3	44·1	34·7	55·2	35·2	38·8	38·3	9·4	14·9	5·5	+ 7·3	SW	NW	5·0	0·3	1·8	320	0·00
21	..	30·092	38·0	33·2	35·3	25·2	47·4	..	39·1	38·3	10·1	12·7	4·2	− 1·8	NW	NNE	4·5	0·0	1·3	205	0·00
22	First Qr.	30·340	39·2	30·5	34·5	27·0	48·0	21·7	37·8	37·6	7·5	10·7	3·9	− 2·8	NNE	N; NW	0·0	0·0	0·0	70	0·00
23	..	30·440	40·2	30·7	34·2	30·1	41·3	19·6	38·3	37·8	4·1	8·4	1·5	− 3·3	W	Calm	0·0	0·0	0·0	40	0·00
24	..	30·445	41·8	25·3	32·0	28·8	51·2	15·2	38·8	38·3	3·2	7·8	2·0	− 5·8	WNW	WNW	0·0	0·0	0·0	15	0·00
25	..	30·260	42·2	21·4	32·9	28·0	48·4	10·2	38·3	37·8	4·9	10·1	0·0	− 5·1	W ; SW	S	0·0	0·0	0·0	65	0·00
26	Perigee	29·990	33·0	26·7	29·6	22·1	41·6	16·7	38·3	37·8	7·5	9·9	3·7	− 8·7	SSE	SSE	0·0	0·0	0·0	105	0·00
27	Greatest Declination N.	29·997	44·4	29·5	36·2	30·3	56·5	21·7	38·3	37·8	5·9	9·5	4·1	− 2·1	SSE	S	0·0	0·0	0·0	55	0·00
28	..	30·113	50·0	28·0	38·7	32·6	62·5	19·0	38·8	36·5	6·1	13·9	1·4	+ 0·6	S	SW	0·0	0·0	0·0	105	0·00
29	Full	30·126	50·0	40·0	44·7	42·0	55·4	26·0	36·1	35·9	2·7	6·1	1·8	+ 6·8	SW	SW	2·0	0·0	0·1	235	0·00
30	..	29·794	51·0	43·9	48·3	47·8	51·0	41·0	38·3	36·0	0·5	3·2	0·0	+10·7	SW	W	3·0	0·0	0·3	230	0·26
31	..	29·818	45·0	34·3	37·8	33·3	53·5	40·0	37·8	37·4	4·5	5·8	3·0	+ 0·5	W ; NE	NE ; W	0·0	0·0	0·0	110	0·25
Means	..	30·171	43·6	31·7	37·5	33·5	47·3	25·1	39·9	39·1	4·0	6·9	1·7	+ 0·9	...	...	..	..	..	Sum 3705	Sum 0·76

BAROMETER READINGS.

The first minimum in the month was 29in·920 on the 9th.

The first maximum in the month was 30in·455 on the 12th ; the second minimum ,, was 30in·144 on the 13th.

The absolute maximum ,, was 30in·557 on the 17th ; the absolute minimum ,, was 29in·733 on the 20th.

The third maximum ,, was 30in·489 on the 24th ; the fourth minimum ,, was 29in·930 on the 26th.

The fourth maximum ,, was 30in·160 on the 29th.

The range in the month was 0in·824. The mean for the month was 30in·171, being 0in·449 *higher* than the average of the preceding 17 years.

TEMPERATURE OF THE AIR.

The highest in the month was 51°·9 on the 9th; the lowest was 20°·9 on the 6th; and the range in the month was 31°·0.

The mean ,, of all the highest daily readings was 43°·6, being 0°·6 *higher* than the average of the preceding 17 years.

The mean ,, of all the lowest daily readings was 31°·7, being 1°·9 *lower* than the average of the preceding 17 years.

The mean daily range was 11°·9, being 2°·5 *higher* than the average of the preceding 17 years.

The mean for the month was 37°·5, being 0°·6 *lower* than the average of the preceding 17 years.

MONTH and DAY, 1858.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Jan. 1	s	s	0	0 : 10, ci, ci.-cu
2	s	s	10, cu, ci.-cu, th.-f	10, cu, ci.-cu
3	s	s	10	10 : 0
4	m	m : s	0	8, ci, ci.-cu
5	m	m	10, sn	10, sn
6	0	0 : w	8	10 : 8
7	s	s	8, ci.-cu, ci	0
8	0	0	10, r	10, oc.-r
9	v	v	10, s, ci.-s, th.-r	10, cu, ci.-cu, ci.-s, r : 0, f
10	s	s	8, ci.-s, ci	10 : th.-r
11	w	w	10, r	0
12	m	s	0, h.-fr	0 : 8, ci.-s
13	s	s : sps, g cur	8	8 : 0, f
14	s, sps, g cur	s, sps, g cur	0, h.-fr	8, cu, ci.-cu, ci : 1
15	s	s	10	10 : 8, ci, f
16	ss, sps, g cur	w : ss, sps, g cur	0, h : 10, r	10
17	v	v	10, th.-f	10 : 0, f
18	s	s	8, ci.-cu, h.-fr	7, ci.-cu, ci.-s, f : 0
19	s	s	10, ci.-s	5, ci, ci.-s : 0
20	w	w	10	0
21	w	w	0 : 10, sn	10, sn : 0
22	w	w	10, ci.-cu, ci.-s	0 : 10, f, sn
23	w	w	7, ci, f	7, ci, h : 0, f
24	s	s : s, sps, g cur	0, h.-fr	7, ci.-cu, ci : 10, ci.-s
25	w	w	7, ci.-cu	7, ci, ci.-s : 0 : 10, cu.-s, sc
26	w	w	0, h.-fr	7, cu, ci.-cu : 0
27	w	w	0	0
28	w	w	0	0 : f
29	w	w	10, ci.-cu, cu.-s, ci, sl.-r	10
30	0	0	10, r	10, r
31	v	v	7, ci : 0	0 : f

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 49°·5 on the 30th; and the lowest was 17°·9 on the 26th.
The mean ,, was 33°·5, being 1°·9 *less* than the average of the preceding 17 years.

Elastic Force of Vapour.—The mean for the month was 0^{in}·192, being 0^{in}·013 *less* than the average of the preceding 17 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 2^{gr}·2, being 0^{gr}·2 *less* than the average of the preceding 17 years.

Degree of Humidity.—The mean for the month was 86 (that of Saturation being represented by 100), being 3 *less* than the average of the preceding 17 years.

Weight of a Cubic Foot of Air.—The mean for the month was 563 grains, being 10 grains *greater* than the average of the preceding 17 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 5·6.

WIND.

The proportions were of N. 5, S. 11, W. 12, and E. 3. The greatest pressure in the month was 5^{lbs} on the square foot on the 20th.

RAIN.

Fell on 5 days in the month, amounting to 0^{in}·8 as measured in the simple cylinder gauge partly sunk below the ground; being 1^{in}·2 *less* than the average fall of the preceding 17 years.

MONTH and DAY, 1858.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value	Dew Point. Mean Daily Value	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9h A.M. next morning	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Osler's. General Direction. P.M.	Osler's. Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 24 Obs.	Whewell's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches read at 9h P.M.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
Feb. 1	In Equator	29·742	37·8	29·5	32·0	21·1	43·0	22·5	38·3	37·8	10·9	14·6	9·2	− 5·2	W : NW	NW	3·3	0·0	0·2	160	0·00
2	. .	29·675	34·2	26·3	29·5	23·9	37·7	17·0	38·3	37·8	5·6	11·5	0·3	− 7·5	W : SW	S ; ESE	0·0	0·0	0·0	30	0·30
3	. .	29·650	47·0	30·5	37·9	37·8	46·0	28·0	38·1	37·7	0·1	2·9	0·0	+ 0·6	ESE	SW	2·0	0·0	0·0	270	0·00
4	. .	29·469	50·0	41·7	44·2	42·2	49·5	14·7	38·8	38·3	2·0	2·6	0·9	+ 6·5	SW	SW	3·0	0·0	0·3	160	0·47
5	Last Qr.	29·876	52·8	36·2	43·4	41·2	52·5	30·0	39·6	39·1	2·2	8·0	1·3	+ 5·0	SW	SW	0·0	0·0	0·0	135	0·00
6	. .	29·934	47·2	35·9	40·1	37·2	58·2	32·0	40·8	40·2	2·9	6·5	0·0	+ 1·1	SE	SE	0·0	0·0	0·0	70	0·00
7	Apogee	29·860	45·7	27·7	35·4	31·6	57·8	20·0	42·3	40·6	3·8	8·6	3·3	− 3·8	SE	ESE	0·0	0·0	0·0	45	0·00
8	. .	29·934	39·5	27·0	31·7	24·5	56·0	. .	41·3	40·6	7·2	12·5	4·1	− 7·5	ESE	ESE	0·0	0·0	0·0	95	0·00
9	Greatest Declination S.	29·969	38·0	27·7	32·0	25·8	45·8	21·0	40·3	39·7	6·2	8·6	4·1	− 7·0	SE	SE	0·0	0·0	0·0	100	0·00
10	. .	29·963	39·0	29·3	31·8	28·9	52·0	23·0	40·8	39·7	2·9	5·0	0·4	− 6·9	ESE	ENE	0·0	0·0	0·0	60	0·00
11	. .	29·896	35·8	28·5	31·2	29·6	36·0	28·0	39·8	38·3	1·6	7·8	1·9	− 7·3	NE	NE	0·0	0·0	0·0	10	0·00
12	. .	30·062	43·8	32·0	37·4	37·3	45·0	29·0	39·3	37·8	0·1	1·8	0·0	− 0·9	NE	ENE	0·0	0·0	0·0	25	0·01
13	New	29·995	43·8	38·8	40·4	40·3	45·8	38·0	39·8	37·8	0·1	0·4	0·0	+ 2·2	ENE	ENE	0·0	0·0	0·0	20	0·07
14	. .	29·784	41·5	34·0	36·7	36·5	40·5	39·2	39·8	39·3	0·2	0·7	0·0	− 1·3	ENE	ENE	0·0	0·0	0·0	110	0·81
15	. .	29·804	42·9	30·5	36·0	33·3	49·8	24·1	39·1	38·3	2·7	7·1	1·3	− 2·1	NE	NNE	0·0	0·0	0·0	70	0·06
16	In Equator	29·871	47·0	33·2	37·3	31·5	61·4	25·2	40·1	38·8	5·8	7·8	3·9	− 0·8	NNE	NNE	0·0	0·0	0·0	45	0·00
17	. .	30·027	46·0	27·9	35·6	32·4	62·2	28·2	39·1	38·6	3·2	7·9	2·6	− 2·6	N	ESE	0·0	0·0	0·0	20	0·00
18	. .	30·002	38·0	27·7	30·8	22·9	49·2	20·0	39·3	38·8	7·9	10·6	5·1	− 7·5	SE	E	0·0	0·0	0·0	85	0·00
19	. .	29·865	37·0	24·0	30·0	26·4	. .	12·2	38·8	38·3	3·6	7·8	2·2	− 8·4	ESE	E	0·0	0·0	0·0	50	0·00
20	. .	29·753	39·6	25·9	31·6	26·0	52·0	17·2	38·1	37·6	5·6	11·5	4·8	− 6·9	ESE	SE	0·0	0·0	0·0	90	0·00
21	First Qr.	29·785	42·0	28·0	33·3	29·4	55·2	20·2	38·3	37·8	3·9	8·3	3·1	− 5·2	SE	ESE	0·0	0·0	0·0	65	0·00
22	Perigee Greatest Dec. N.	29·687	39·7	27·5	33·1	31·0	53·0	. .	38·8	38·3	2·1	7·7	0·8	− 5·5	SE	E	2·5	0·0	0·3	130	0·00
23	. .	29·633	40·2	29·9	35·1	31·7	42·5	23·0	37·3	36·9	3·4	6·7	1·8	− 3·8	E	ESE	0·0	0·0	0·0	50	0·00
24	. .	29·957	44·1	31·3	35·4	27·9	59·0	25·8	36·8	36·4	7·5	9·7	4·3	− 3·7	E	E	1·0	0·0	0·0	70	0·00
25	. .	30·136	40·0	25·7	31·4	22·5	53·7	19·4	37·3	36·9	8·9	13·7	4·2	− 8·1	NE	NE	3·0	0·0	0·3	105	0·00
26	. .	29·924	37·2	23·5	30·3	24·2	50·8	14·0	36·8	36·0	6·1	10·7	4·8	− 9·4	NE	NE	1·0	0·0	0·1	70	0·00
27	Full	29·735	41·0	28·3	33·0	25·6	54·6	25·6	37·3	36·0	7·4	13·6	3·8	− 6·8	NNE	E	0·0	0·0	0·0	75	0·00
28	. .	29·558	40·2	25·3	32·3	27·2	44·0	17·0	36·8	36·0	5·1	8·3	1·5	− 7·7	NE	ENE	3·0	0·0	0·2	115	0·00
Means	. .	29·841	41·8	29·8	34·6	30·3	50·1	23·6	39·0	38·2	4·2	8·0	2·5	− 3·9	. . .	. . .	. .	. .	. .	Sum 2330	Sum 1·72

BAROMETER READINGS.

The absolute minimum in the month was 29$^{\text{in}}$·393 on the 4th.

The first maximum in the month was 30$^{\text{in}}$·017 on the 10th; the second minimum „ was 29$^{\text{in}}$·863 on the 11th.

The second maximum „ was 30$^{\text{in}}$·089 on the 12th; the third minimum „ was 29$^{\text{in}}$·782 on the 14th.

The third maximum „ was 30$^{\text{in}}$·042 on the 17th; the fourth minimum „ was 29$^{\text{in}}$·566 on the 23d.

The absolute maximum „ was 30$^{\text{in}}$·206 on the 25th;

The range in the month was 0$^{\text{in}}$·813.

The mean for the month was 29$^{\text{in}}$·841, being 0$^{\text{in}}$·063 *higher* than the average of the preceding 17 years.

TEMPERATURE OF THE AIR.

The highest in the month was 52°·8 on the 5th; the lowest was 23°·5 on the 26th; and the range in the month was 29·3.

The mean „ of all the highest daily readings was 41°·8, being 2°·7 *lower* than the average of the preceding 17 years.

The mean „ of all the lowest daily readings was 29·8, being 3°·6 *lower* than the average of the preceding 17 years.

The mean daily range was 12°·0, being 0°·9 *higher* than the average of the preceding 17 years.

The mean for the month was 34°·6, being 3°·9 *lower* than the average of the preceding 17 years.

MONTH and DAY, 1858.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Feb. 1	w	o	o	10, cu, s : o
2	ss, sps, g cur	ss, sps, g cur	10, sn	10, sn
3	s	s	10	10 : r
4	w	w	10, sl.-r : h.-r	10, h.-r : o
5	w	w	7, s	7, ci, ci.-s : o, h
6	m	m	10, cu, ci.-cu	7, cu, ci.-cu, ci : o
7	m	m	3, s, ci	o
8	m	m	o	o
9	v, sps, g cur	v, sps, g cur	7, h.-fr	8, ci, ci.-s : o
10	m	m	10, ci.-cu, ci	10, cu, ci.-cu, ci
11	w	o	10	10
12	o	o : s	10, r	10 : th.-r
13	N, s, sps, g cur	N, s, sps, g cur	10, f	10, h.-r
14	o	o	10, h.-r	10, h.-r : sn, sl
15	s	o	10	10
16	w	s	10, cu, ci-cu, ci	10, cu, ci.-cu, ci, sl.-r
17	s, sps, g cur	s, sps, g cur	o, h.-fr	o
18	v	v	o	o
19			o	o
20			o	o
21			3, ci, ci.-s, h.-fr : 9, cu, ci.-cu, ci	o
22			o	o
23			10, sn	10 : sl.-r
24			7 : o	o
25			o, h.-fr	o
26			o	o : 10
27			o	o
28			10, ci.-cu, cu.-s, ci.-s	10, ci.-cu, cu.-s, ci.-s

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was $46^{\circ}\cdot0$ on the 4th ; and the lowest was $18^{\circ}\cdot8$ on the 25th.

The mean „ was $30^{\circ}\cdot3$, being $4^{\circ}\cdot4$ *less* than the average of the preceding 17 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot169$, being $0^{in}\cdot034$ *less* than the average of the preceding 17 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{gr}\cdot0$, being $0^{gr}\cdot4$ *less* than the average of the preceding 17 years.

Degree of Humidity.—The mean for the month was 84 (that of Saturation being represented by 100), being 2 *less* than the average of the preceding 17 years.

Weight of a Cubic Foot of Air.—The mean for the month was 560 grains, being 7 grains *greater* than the average of the preceding 17 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 5·1.

WIND.

The proportions were of N. 7, S. 4, W. 3, and E. 14. The greatest pressure in the month was $3^{lbs}\cdot3$ on the square foot on the 1st.

RAIN.

Fell on 6 days in the month, amounting to $1^{in}\cdot7$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{in}\cdot3$ *greater* than the average fall of the preceding 17 years.

ELECTRICITY.—February 19, the insulating lamp was not burning till March 5.

MONTH and DAY, 1858.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	WIND AS DEDUCED FROM ANEMOMETERS.						Rain in Inches read at 9h P.M.
			Dry.			Dew Point.	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9h. A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning.						OSLER'S. General Direction.		Pressure in lbs. on the square foot.			WHEWELL'S Amount of Horizontal Movement of the Air on each Day.	
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.		
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Mar. 1	In Equator	29·415	34·3	26·2	29·6	23·6	41·2	..	36·8	35·1	6·0	11·2	2·2	−10·5	ENE	E	3·0	0·0	0·3	165	0·00
2	..	29·496	34·2	26·3	29·4	25·1	33·0	..	36·8	35·1	4·3	6·4	2·0	−10·6	E	ENE	4·0	0·0	1·0	195	0·04
3	..	29·567	33·7	27·2	29·6	24·7	33·7	..	34·8	34·1	4·9	9·1	2·3	−10·3	ENE	NE	2·0	0·0	0·1	95	0·30
4	..	29·539	43·0	25·9	33·3	24·0	58·6	24·6	34·8	34·5	9·3	14·0	8·0	− 6·6	NE	NE	0·0	0·0	0·0	35	0·00
5	..	29·435	39·8	28·4	33·1	29·6	40·0	21·1	34·3	34·1	3·5	7·4	2·0	− 6·9	N	NE; NW	0·0	0·0	0·0	140	0·00
6	..	28·930	39·5	27·7	32·9	24·2	48·0	24·8	35·0	35·0	8·7	11·1	3·6	− 7·2	SW; NW	NW	0·0	0·0	0·0	165	0·01
7	Apogee; Last Quarter.	29·113	40·5	27·5	33·1	30·2	..	21·0	34·8	34·8	2·9	9·1	0·8	− 7·0	W	W; SW	0·0	0·0	0·0	200	0·00
8	Greatest Declination S.	29·262	41·7	26·7	31·1	29·1	50·0	26·0	35·1	34·9	2·0	8·1	0·0	− 9·0	SW; NW	NW	4·0	0·0	0·2	135	0·00
9	..	29·521	41·6	27·5	33·2	24·8	49·5	21·5	35·3	35·1	8·4	11·6	5·8	− 7·0	WSW	WNW	0·0	0·0	0·0	145	0·00
10	..	29·691	44·0	30·3	35·3	30·0	51·0	22·8	35·3	35·1	5·3	11·7	1·4	− 5·0	W	NW; NE	0·0	0·0	0·0	15	0·00
11	..	29·858	43·0	23·6	32·4	22·9	60·5	15·0	35·3	35·1	9·5	15·9	7·4	− 8·1	NE	N	0·0	0·0	0·0	20	0·00
12	..	30·009	41·4	25·2	32·6	29·2	50·2	15·0	35·3	35·1	3·4	6·2	1·0	− 8·0	N; NW	WNW	0·0	0·0	0·0	170	0·00
13	..	29·231	50·8	35·0	44·9	43·2	53·2	27·3	35·6	35·4	1·7	3·8	0·0	+ 3·9	SW	W; WSW	3·0	0·0	0·1	180	0·25
14	..	29·333	49·2	36·9	42·8	35·8	58·0	31·8	36·8	36·5	7·0	9·9	2·6	+ 1·5	W	W; NW	5·0	0·0	0·5	215	0·08
15	New; In Equator	29·786	51·4	39·5	45·8	38·8	52·0	39·0	37·3	37·0	7·0	12·8	0·7	+ 4·3	NW	W; NW	2·0	0·0	0·2	100	0·00
16	..	29·940	60·0	42·7	50·8	43·2	77·0	35·8	38·5	38·1	7·6	13·7	5·5	+ 9·1	W	W	0·0	0·0	0·0	105	0·00
17	..	30·121	54·4	44·2	48·3	43·0	58·0	38·0	39·6	38·9	5·3	8·4	3·8	+ 6·5	W	WSW	0·0	0·0	0·0	40	0·02
18	..	30·070	57·0	41·5	48·5	39·0	71·7	41·5	39·3	38·8	9·5	14·2	4·2	+ 6·7	WSW	W	0·0	0·0	0·0	30	0·00
19	Perigee	30·185	61·4	41·9	49·5	42·3	78·6	36·5	41·3	40·7	7·2	14·8	2·2	+ 7·7	Calm	Calm	0·0	0·0	0·0	0	0·00
20	..	30·306	59·7	42·5	50·3	39·9	81·8	40·2	42·8	41·4	10·4	17·6	2·0	+ 8·4	Calm	Calm	0·0	0·0	0·0	5	0·00
21	..	30·354	61·7	33·9	47·4	38·0	77·0	..	45·3	43·8	9·4	18·4	3·6	+ 5·5	Calm	Calm	0·0	0·0	0·0	5	0·00
22	Greatest Dec. N. First Quarter	30·422	61·6	31·7	46·1	38·8	80·2	24·6	46·7	45·0	7·3	16·7	4·8	+ 4·2	Calm	SE	0·0	0·0	0·0	15	0·00
23	..	30·326	65·0	33·0	49·0	42·3	74·4	..	45·6	44·3	6·7	17·8	2·1	+ 7·0	Calm	Calm	0·0	0·0	0·0	5	0·00
24	..	30·013	68·7	40·7	54·8	43·4	84·6	35·0	46·3	45·0	11·4	22·5	1·4	+12·7	Calm	NW	0·0	0·0	0·0	10	0·00
25	..	30·106	53·7	37·3	42·5	32·9	67·0	36·2	46·3	45·0	9·6	13·0	5·2	+ 0·3	NE	NE	0·0	0·0	0·0	55	0·00
26	..	30·072	54·2	31·1	42·6	33·1	72·6	21·0	46·6	45·2	9·5	17·8	5·2	+ 0·3	E	W	0·0	0·0	0·0	40	0·00
27	..	30·034	54·0	33·6	43·5	35·7	68·0	26·8	47·3	45·0	7·8	16·2	4·6	+ 1·1	WSW	N	0·0	0·0	0·0	10	0·00
28	In Equator	29·994	57·0	36·9	46·7	38·8	77·0	29·0	46·3	45·0	7·9	16·0	0·7	+ 4·1	SE	SW	0·0	0·0	0·0	50	0·00
29	Full	29·820	61·8	37·5	49·0	37·2	81·7	28·0	47·3	45·5	11·8	20·5	7·0	+ 7·1	SSW	SW	0·0	0·0	0·0	75	0·00
30	..	29·553	59·0	35·9	48·2	44·1	78·7	26·0	47·3	45·8	4·1	11·2	3·8	+ 5·2	SSW	SW	2·0	0·0	0·0	115	0·02
31	..	29·102	54·5	43·0	48·1	44·6	63·0	40·0	47·7	46·1	3·5	6·8	2·5	+ 4·7	SW	SW	2·5	0·0	0·2	150	0·10
Means	..	29·761	50·7	33·6	41·4	34·5	62·3	28·8	40·2	39·4	6·9	12·7	3·2	+ 0·1	...	...	..	..	..	Sum 2685	Sum 0·82

BAROMETER READINGS.

The first minimum in the month was 29^{in}·388 on the 1st.

The first maximum in the month was 29^{in}·656 on the 3rd; the absolute minimum ,, was 28^{in}·882 on the 6th.

The second maximum ,, was 30^{in}·071 on the 12th; the third minimum ,, was 29^{in}·143 on the 13th.

The third maximum ,, was 29^{in}·508 on the 14th; the fourth minimum ,, was 29^{in}·378 on the 14th.

The absolute maximum ,, was 30^{in}·448 on the 22nd; the fifth minimum ,, was 29^{in}·951 on the 24th.

The fifth maximum ,, was 30^{in}·158 on the 25th; the sixth minimum ,, was 28^{in}·938 on the 31st.

The range in the month was 1^{in}·566.

The mean for the month was 29^{in}·761, being 0^{in}·041 *lower* than the average of the preceding 17 years.

TEMPERATURE OF THE AIR.

The highest in the month was 68°·7 on the 24th; the lowest was 23°·6 on the 11th; and the range in the month was 45°·1.

The mean ,, of all the highest daily readings was 50°·7, being 1°·0 *higher* than the average of the preceding 17 years.

The mean ,, of all the lowest daily readings was 33°·6, being 1°·5 *lower* than the average of the preceding 17 years.

The mean daily range was 17°·1, being 2°·4 *higher* than the average of the preceding 17 years.

The mean for the month was 41°·4, being 0°·2 *lower* than the average of the preceding 17 years.

MONTH and DAY, 1858.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Mar. 1			10	10, sn
2			10, sn	10
3			10, sn	10, sn
4			0	10
5		m	10, sn	v, ci.-cu
6	N, s	m	10, sn, r	0
7	w	w	v, li.-cl	v, li.-cl
8	0	0 : w	10, sn, hl, f	10, sn
9	s	s : s, sps	0 : 8	0
10	s	s	5, oc.-sn	5, ci.-cu, ci
11	m	s	0	0
12	s	s	10, ci.-cu	10
13	0	0 : w	10, r	10, cu, ci.-cu : 0
14	w	w	7, cu, ci.-s, s	10, r : 0
15	w	N, s : s	0	10, ci.-cu, ci : 7
16	0	w	0	0 : 10
17	0	0	10, ci.-cu, ci.-s, ci, h	10, cu, ci.-cu, n : 7
18	s	s	0	9, cu, ci.-cu : 7, ci, h
19	v	v	10, cu, ci.-cu	10, cu, ci.-cu
20	s	s	0	7, ci.-cu
21	w	w	0	0
22	s	s : s, sps	0	0
23	s	s	0, h	0
24	s	s	0	0 : f
25	v	v : s, sps	10, ci.-cu	10, cu, ci.-cu
26	v	v	0	7, cu, ci.-cu, ci : 0
27	v	v	10, h	5, ci : 10, cu, ci.-cu
28	s	s	3, ci	3, ci, ci.-s
29	v	v	0	0
30	s	s	10, shs.-r	10, cu, ci.-cu, sl.-r
31	w	0	10	10, sl.-r

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 48°·1 on the 30th; and the lowest was 20°·2 on the 1st.
The mean ,, was 34°·5, being 1°·8 *less* than the average of the preceding 17 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot199$, being $0^{in}\cdot017$ *less* than the average of the preceding 17 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{gr}\cdot3$, being $0^{gr}\cdot2$ *less* than the average of the preceding 17 years.

Degree of Humidity.—The mean for the month was 78 (that of Saturation being represented by 100), being 4 *less* than the average of the preceding 17 years.

Weight of a Cubic Foot of Air.—The mean for the month was 551 grains, being the same as the average of the preceding 17 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 5·4.

WIND.

The proportions were of N. 7, S. 4, W. 15, and E. 5. The greatest pressure in the month was $5^{lbs}\cdot0$ on the square foot on the 14th.

RAIN.

Fell on 8 days in the month, amounting to $0^{in}\cdot8$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{in}\cdot5$ *less* than the average fall of the preceding 17 years.

MONTH and DAY, 1858.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	Wind as deduced from Anemometers.						Rain in Inches read at 9h P.M.
			Dry.			Dew Point.	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning.						Osler's.					Whewell's.	
															General Direction.		Pressure in lbs. on the square foot.			Amount of Horizontal Movement of the Air on each Day.	
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.		
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
April 1	..	29·459	48·3	34·7	38·4	32·5	51·0	31·2	48·8	46·8	5·9	9·2	0·8	— 5·2	N	NNE	3·0	0·0	0·5	135	0·12
2	..	29·684	44·0	27·2	34·7	29·1	53·2	29·0	48·1	45·8	5·6	13·6	2·6	— 9·4	Calm	WSW ; SSE	0·0	0·0	0·0	60	0·00
3	..	29·450	59·5	33·3	47·3	44·3	75·2	34·0	48·3	46·8	3·0	9·8	2·3	+ 2·8	Calm ; WSW	W	3·5	0·0	0·5	215	0·18
4	Apogee: Greatest Dec. S	29·912	54·4	36·5	43·1	39·1	69·8	38·4	48·9	45·8	4·0	8·6	2·6	— 1·7	W	NE	0·0	0·0	0·0	90	0·00
5	..	29·764	47·6	34·4	39·9	32·2	61·4	28·3	48·8	45·8	7·7	11·0	2·2	— 5·2	SE	SE	5·0	0·0	0·5	225	0·00
6	Last Qr.	29·721	43·3	37·4	38·9	34·4	46·0	36·8	47·8	45·4	4·5	8·1	3·4	— 6·5	ESE	E	2·0	0·0	0·1	75	0·03
7	..	29·587	43·2	37·1	39·3	37·5	45·0	31·1	47·3	45·0	1·8	4·4	0·0	— 6·2	E	E	2·5	0·0	0·1	140	0·20
8	..	29·405	57·0	39·2	44·5	43·4	58·0	39·0	47·3	45·0	1·1	5·0	0·0	— 1·0	Calm	E	0·0	0·0	0·0	135	0·59
9	..	29·617	44·6	34·3	37·1	32·6	48·5	..	47·3	45·0	4·5	6·0	1·9	— 8·3	E	ENE	2·0	0·0	0·0	100	0·20
10	..	29·699	49·0	34·0	39·4	31·1	64·0	..	46·3	43·6	8·3	13·2	5·9	— 5·7	NE	NE	1·8	0·0	0·0	110	0·03
11	..	29·755	56·2	27·9	39·2	31·8	70·4	18·0	44·3	42·5	7·4	19·4	3·9	— 5·8	N	NW ; NE	0·0	0·0	0·0	25	0·00
12	In Equator	29·789	44·0	34·7	37·9	30·8	63·0	33·2	44·3	42·9	7·1	10·6	2·6	— 7·0	NE	Calm ; NE	0·0	0·0	0·0	10	0·00
13	New	29·902	49·0	34·5	39·6	30·0	64·0	30·5	45·3	43·6	9·6	14·3	5·4	— 5·6	NE	E; SE	0·0	0·0	0·0	25	0·00
14	..	30·009	57·2	30·9	44·7	34·8	69·4	22·3	45·8	44·0	9·9	18·4	3·0	— 0·8	SE	SE	0·0	0·0	0·0	75	0·00
15	..	29·870	68·0	44·9	55·5	42·2	82·5	..	46·9	44·4	13·3	21·2	5·5	+ 9·8	S	SSW	0·0	0·0	0·0	85	0·00
16	Perigee	29·778	76·0	48·8	60·1	49·9	102·3	..	49·3	46·6	10·2	21·1	2·5	+ 14·1	SW	Calm	0·0	0·0	0·0	10	0·00
17	..	29·644	58·6	46·5	49·8	46·7	61·7	..	50·3	46·0	3·1	8·0	2·0	+ 3·6	NE	NE	0·0	0·0	0·0	20	0·22
18	Greatest Declination N.	30·055	62·0	36·7	47·8	40·6	84·2	30·0	52·3	49·5	7·2	18·4	0·8	+ 1·4	NE	E	0·0	0·0	0·0	10	0·00
19	..	29·931	65·7	34·3	49·8	40·2	87·2	22·6	52·3	49·5	9·6	21·7	1·0	+ 3·3	E	SE	0·0	0·0	0·0	30	0·00
20	First Qr.	29·948	68·0	37·1	52·6	44·3	88·5	29·2	53·8	49·5	8·3	19·1	1·7	+ 5·9	SE : N	NNE ; ESE	0·0	0·0	0·0	0	0·00
21	..	30·112	71·1	38·1	55·0	45·0	91·9	28·8	54·7	50·9	10·0	24·7	1·2	+ 8·0	ESE	Calm	0·0	0·0	0·0	5	0·00
22	..	30·251	72·9	42·7	56·2	44·7	94·7	37·3	56·7	53·2	11·5	23·9	6·9	+ 8·7	ESE	E	0·0	0·0	0·0	40	0·00
23	..	30·107	69·3	40·3	54·2	43·3	89·6	30·4	56·7	52·7	10·9	22·1	6·7	+ 6·6	E	ENE	0·0	0·0	0·0	90	0·00
24	In Equator	29·971	67·0	42·0	54·3	41·5	89·0	31·8	56·7	53·2	12·8	22·7	1·5	+ 6·7	ENE ; SW	W	0·0	0·0	0·0	110	0·00
25	..	29·860	60·7	44·5	49·6	45·3	77·3	34·5	58·7	53·2	4·3	12·9	2·0	+ 2·0	SW	Calm	0·0	0·0	0·0	110	0·07
26	..	29·922	61·8	42·6	48·2	43·0	80·0	34·0	57·7	53·2	5·2	14·3	1·8	+ 0·6	NW	NE ; Calm	0·0	0·0	0·0	15	0·00
27	..	29·945	50·0	38·0	44·0	41·1	55·0	31·0	57·7	53·2	2·9	7·6	1·4	— 4·0	Calm ; N	NE	0·0	0·0	0·0	10	0·00
28	Full	29·873	65·0	44·0	51·4	42·5	87·3	42·2	56·9	53·2	8·9	18·7	2·6	+ 2·0	NE ; Calm	SW	0·0	0·0	0·0	0	0·00
29	..	29·394	58·0	40·9	48·8	44·4	77·3	31·2	56·7	53·2	4·4	10·1	3·0	— 0·3	S	SW	0·0	0·0	0·0	40	0·60
30	..	28·988	56·4	40·8	44·6	35·6	74·2	39·8	56·9	53·2	9·0	16·6	6·2	— 4·9	SW	SW	0·0	0·0	0·0	200	0·10
Means	..	29·779	57·6	38·0	46·2	39·1	72·1	31·8	51·1	48·1	7·1	14·5	2·8	— 0·1	...	...	..	..	..	Sum 2195	Sum 2·34

BAROMETER READINGS.

The first maximum in the month was $29^{\text{in}}\cdot798$ on the 2nd ; the first minimum in the month was $29^{\text{in}}\cdot427$ on the 3rd.

The second maximum ,, was $30^{\text{in}}\cdot003$ on the 4th ; the absolute minimum ,, was $29^{\text{in}}\cdot367$ on the 8th.

The third maximum ,, was $30^{\text{in}}\cdot035$ on the 14th ; the third minimum ,, was $29^{\text{in}}\cdot738$ on the 16th.

The fourth maximum ,, was $30^{\text{in}}\cdot087$ on the 18th ; the fourth minimum ,, was $29^{\text{in}}\cdot911$ on the 19th.

The absolute maximum ,, was $30^{\text{in}}\cdot270$ on the 22nd. The lowest reading was $28^{\text{in}}\cdot976$ on the 30th, the barometer still falling.

The range in the month was $0^{\text{in}}\cdot903$.

The mean for the month was $29^{\text{in}}\cdot779$, being $0^{\text{in}}\cdot043$ *higher* than the average of the preceding 17 years.

TEMPERATURE OF THE AIR.

The highest in the month was 76°·0 on the 16th ; the lowest was 27°·2 on the 2nd.

The range ,, was 48°·8.

The mean ,, of all the highest daily readings was 57°·6, being 0°·6 *higher* than the average of the preceding 17 years.

The mean ,, of all the lowest daily readings was 38°·0, being 0°·9 *lower* than the average of the preceding 17 years.

The mean daily range was 19°·6, being 1°·5 *higher* than the average of the preceding 17 years.

The mean for the month was 46°·2, being 0°·3 *lower* than the average of the preceding 17 years.

MONTH and DAY, 1858.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
April 1			10, r	10, oc.-r : 0
2			10, ci.-s, ci, h	10, ci.-cu, cu.-s, shs.-sn.-hl
3			10, cu, ci.-cu	10, cu, ci.-cu, ci.-s, shs.-r, t : 0
4			7, ci.-cu, s	7, ci.-cu, s, sl.-r : 0
5			7, ci.-cu	7, ci.-cu : 10, r
6			10, sl.-r	10, sl.-r
7			10, sl.-r	10, r
8			10, ci-cu, ci	10, cu, ci.-cu, ci, sl.-r
9			10, ci.-s, sn	10, s, ci.-s
10			7, ci.-cu, ci.-s, ci	10, ci.-cu, ci.-s : 3, ci : 0
11			0	0
12			7, li.-cl	10, ci.-s
13	m	m	10, cu, ci.-cu, ci	10, ci.-cu, ci.-s, ci : 0
14	s	s	0 : 10	10, ci.-cu, ci
15	w	w : s	7, ci.-cu, ci.-s	7, ci.-s : 0
16	ss	ss	3, ci.-cu, ci	3, ci.-cu : 10, l, h.-r
17	s	s	10, r	10, ci.-cu, ci.-s : 0, f
18	s	s	0, h	0
19	s	s	0	0
20	v	v : s, sps	10, ci.-cu, ci.-s, ci	10, cu.-s, ci.-s
21	s	s	0, h	0
22	m	m : s	0	0
23	s	s	0	0
24	w	v	7, ci.-cu, ci	7, ci.-cu, ci : 0
25	s	s	10, ci.-s, r	7, cu, cu.-s, ci.-s, r : 10, s, ci.-s
26	s	s : s, sps	10, s, ci.-s	10, s : 0 : 0, f
27	v	v	0, ci.-s, th.-f	10, ci.-s
28	s	s	10, s, f : 7, cu.-s	7, ci.-cu, cu.-s, ci.-s
29	0 : v	v	10, ci.-cu, cu.-s, h.-r	10
30	**P, N**, s, sps, g cur	**P, N**, s, sps, g cur	10, cu, cu.-s, s, hl, h.-r	10, cu, n, t, h.-r : 7, s

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was $52^{\circ}\cdot0$ on the 16th; and the lowest was $25^{\circ}\cdot4$ on the 1st.
The mean ,, was $39^{\circ}\cdot1$, being $1^{\circ}\cdot0$ *less* than the average of the preceding 17 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot238$, being $0^{in}\cdot012$ *less* than the average of the preceding 17 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{gr}\cdot8$, being $0^{gr}\cdot1$ *less* than the average of the preceding 17 years.

Degree of Humidity.—The mean for the month was 77 (that of Saturation being represented by 100), being 2 *less* than the average of the preceding 17 years.

Weight of a Cubic Foot of Air.—The mean for the month was 545 grains, being 1 grain *greater* than the average of the preceding 17 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·2.

WIND.

The proportions were of N. 6, S. 6, W. 6, and E. 12. The greatest pressure in the month was $5^{lbs}\cdot0$ on the square foot on the 5th.

RAIN.

Fell on 11 days in the month, amounting to $2^{in}\cdot3$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{in}\cdot7$ *greater* than the average of the preceding 17 years.

ELECTRICITY.—The apparatus was under repair from April 1 to April 12.

MONTH and DAY, 1858.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	WIND AS DEDUCED FROM ANEMOMETERS.						Rain in Inches read at 9h P.M.
			Dry.			Dew Point.	Highest in the Sun, as shewn by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning.						OSLER'S. General Direction.		Pressure in lbs. on the square foot.			WHEWELL'S.	
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.	Amount of Horizontal Movement of the Air on each Day.	
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
May 1	Apogee	28·977	54·5	36·5	43·1	38·4	71·2	28·0	56·5	52·2	4·7	6·2	2·6	− 6·9	S	SW ; NW	0·0	0·0	0·0	130	0·09
2	Greatest Declination S.	29·240	53·2	40·1	42·5	36·7	58·0	37·0	56·7	53·2	5·8	9·9	3·0	− 8·0	NW ; NE	NE ; N	0·0	0·0	0·0	55	0·15
3	. .	29·405	57·0	37·5	45·9	37·1	78·0	33·8	56·7	52·7	8·8	15·6	2·2	− 5·0	N	E ; NE	0·0	0·0	0·0	70	0·01
4	. .	29·741	54·7	37·2	43·6	40·2	74·6	. .	55·7	51·7	3·4	9·5	0·9	− 7·7	N	N	0·0	0·0	0·0	40	0·05
5	. .	29·892	63·4	33·4	48·6	41·5	84·0	27·2	55·8	51·7	7·1	17·9	1·8	− 3·0	NW	NE	0·0	0·0	0·0	50	0·00
6	Last Qr.	30·179	60·0	38·3	48·2	37·4	82·5	29·8	53·3	51·7	10·8	18·1	6·9	− 3·6	NE	NE	0·0	0·0	0·0	55	0·00
7	. .	30·233	58·4	32·1	44·8	37·5	77·5	23·8	54·0	51·7	7·3	15·6	5·5	− 7·1	NE	NE	0·0	0·0	0·0	45	0·00
8	. .	30·133	59·7	32·7	45·5	37·4	81·5	24·5	54·0	51·7	8·1	17·4	1·5	− 6·3	NE	ENE	0·0	0·0	0·0	40	0·00
9	In Equator	29·990	62·0	36·1	46·9	35·8	87·5	. .	53·8	51·7	11·1	18·4	1·8	− 4·7	. . .	. . .	. .	. .	. .	45	0·00
10	. .	29·908	65·3	41·1	52·8	41·8	87·0	33·1	53·8	51·7	11·0	20·3	5·3	+ 1·4	. . .	. . .	. .	. .	. .	80	0·00
11	. .	29·794	63·0	50·5	49·8	41·5	82·0	31·7	54·7	51·7	8·3	15·0	2·5	− 1·5	. . .	. . .	. .	. .	. .	110	0·04
12	. .	29·588	55·6	41·1	45·8	41·4	63·8	31·2	53·8	51·2	4·4	8·2	2·9	− 5·5	. . .	. . .	. .	. .	. .	80	0·03
13	New	29·553	65·5	36·7	49·1	43·2	85·8	29·0	55·2	52·2	5·9	18·8	1·1	− 2·3	. . .	. . .	. .	. .	. .	95	0·24
14	Perigee	29·488	61·0	42·1	50·9	43·8	61·0	. .	55·2	52·2	7·1	11·0	1·0	− 0·9	. . .	. . .	. .	. .	. .	55	0·19
15	Greatest Declination N.	29·290	61·0	47·5	52·2	47·7	69·7	41·0	55·7	52·7	4·5	9·3	2·4	0·0	. . .	. . .	. .	. .	. .	205	0·07
16	. .	29·576	64·2	47·0	53·0	46·7	79·8	42·7	57·2	53·2	6·3	10·5	2·7	+ 0·4	. . .	. . .	. .	. .	. .	195	0·09
17	. .	29·833	59·6	47·3	52·5	49·3	67·4	43·3	57·2	53·2	3·2	5·8	2·0	− 0·3	. . .	. . .	. .	. .	. .	275	0·06
18	. .	29·767	66·0	50·1	54·8	48·3	79·7	50·0	57·2	53·2	6·5	12·9	2·0	+ 1·7	. . .	. . .	. .	. .	. .	135	0·04
19	First Qr.	29·798	66·0	43·7	53·5	40·1	86·3	37·2	57·7	53·2	13·4	23·0	7·8	+ 0·2	. . .	. . .	. .	. .	. .	160	0·03
20	. .	29·941	69·6	42·7	55·6	45·5	95·8	42·0	56·7	52·7	10·1	20·9	5·2	+ 2·0	. . .	. . .	. .	. .	. .	75	0·00
21	. .	29·701	71·0	47·5	59·5	43·9	88·0	. .	58·7	53·2	15·6	21·6	4·0	+ 5·7	. . .	. . .	. .	. .	. .	135	0·00
22	In Equator	29·708	65·7	49·0	55·3	44·8	83·7	46·0	59·7	53·2	10·5	15·4	4·8	+ 1·2	. . .	. . .	. .	. .	. .	150	0·07
23	. .	29·622	62·9	47·7	53·0	48·2	84·5	. .	60·2	56·2	4·8	9·5	3·6	− 1·3	. . .	. . .	. .	. .	. .	135	0·33
24	. .	29·587	62·7	45·4	55·4	44·8	84·0	39·8	60·2	56·0	10·6	14·6	0·4	+ 1·0	. . .	. . .	. .	. .	. .	150	0·34
25	. .	29·895	60·2	46·1	51·0	44·3	74·0	46·0	60·2	55·8	6·7	13·1	1·5	− 3·6	. . .	. . .	. .	. .	. .	120	0·16
26	. .	29·353	64·6	38·9	49·9	43·1	87·7	32·2	59·7	55·2	6·8	13·9	1·2	− 4·8	. . .	. . .	. .	. .	. .	90	0·00
27	Full	30·008	70·0	46·1	54·8	50·0	90·5	41·2	59·2	54·7	4·8	14·2	1·5	− 0·1	. . .	. . .	. .	. .	. .	80	0·00
28	. .	29·977	63·7	47·1	54·1	43·3	90·3	41·1	58·7	55·2	10·8	16·3	0·8	− 1·1	. . .	. . .	. .	. .	. .	30	0·00
29	Apogee ; Greatest Dec. S.	29·962	75·0	46·6	59·1	50·2	93·0	. .	59·7	56·2	8·9	17·5	2·5	+ 3·7	. . .	. . .	. .	. .	. .	30	0·00
30	. .	29·949	76·7	50·1	63·2	51·7	101·4	45·0	61·7	58·4	11·5	22·3	4·6	+ 7·5	. . .	. . .	. .	. .	. .	40	0·00
31	. .	29·903	81·2	54·0	67·7	53·2	103·8	45·4	61·5	59·0	14·5	23·0	4·4	+11·6	. . .	. . .	. .	. .	. .	25	0·00
Means	. .	29·742	63·7	42·7	51·7	43·5	81·8	36·9	57·1	53·5	8·2	15·0	2·9	− 1·2	. . .	. . .	. .	. .	. .	Sum 2980	Sum 1·99

BAROMETER READINGS.

The absolute minimum in the month was $28^{\text{in}}\cdot951$ on the 1st.

The first maximum in the month was $30^{\text{in}}\cdot257$ on the 7th ; the second minimum , , was $29^{\text{in}}\cdot262$ on the 15th.

The second maximum , , was $29^{\text{in}}\cdot972$ on the 20th ; the third minimum , , was $29^{\text{in}}\cdot322$ on the 24th.

The absolute maximum , , was $30^{\text{in}}\cdot393$ on the 26th.

The range in the month was $1^{\text{in}}\cdot442$.

The mean for the month was $29^{\text{in}}\cdot742$, being $0^{\text{in}}\cdot022$ *lower* than the average of the preceding 17 years.

TEMPERATURE OF THE AIR.

The highest in the month was $81^{\circ}\cdot2$ on the 31st; the lowest was $32^{\circ}\cdot1$ on the 7th ; and the range in the month was $49^{\circ}\cdot1$.

The mean , , of all the highest daily readings was $63^{\circ}\cdot7$, being $0^{\circ}\cdot7$ *lower* than the average of the preceding 17 years.

The mean , , of all the lowest daily readings was $42^{\circ}\cdot7$, being $1^{\circ}\cdot5$ *lower* than the average of the preceding 17 years.

The mean daily range was $21^{\circ}\cdot0$, being $0^{\circ}\cdot9$ *higher* than the average of the preceding 17 years.

The mean for the month was $51^{\circ}\cdot7$, being $1^{\circ}\cdot2$ *lower* than the average of the preceding 17 years.

Osler's Anemometer was under repair from May 9 to the end of the month.

MONTH and DAY, 1858.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
May 1	P, N, s, sps, g cur	P, N, s, sps, g cur	9, cu, ci.-cu, ci.-s, shs.-hl.-r	9, cu, ci.-cu, ci.-s, shs.-hl.-r
2	m	m	10, n, cu.-s, ci.-s, r	10, s, ci.-s, oc.-r, hl : 7, cu.-s, ci.-s, hl, r
3	v	v	7, cu.-s, ci.-s	6, cu, ci.-cu, shs.-r : o
4	P, N, s, sps, g cur	P, N, s, sps, g cur	10, ci.-s, sl.-r	10, ci.-cu, ci.-s, h.-r : o
5	w	w	10, s, f : 7, cu, li.-cl, h	7, s : 10
6			10, ci.-cu, ci.-s	10, ci.-cu, ci.-s
7			o, h.-f : 9, cu, ci.-cu, ci.-s	9, ci.-cu : o
8			o	9, ci.-s : o
9			7, ci.-cu, ci.-s	7, cu, ci.-cu, ci
10			7, ci.-cu	o : 10, ci. s
11	v : N, w	v	10, ci.-s	10, n, cu.-s, ci.-s, r : 7, ci.-cu, ci.-s
12	N, s	s	10, r	10, r : 7, ci.-cu
13	N, w	m	10, ci.-s, oc.-r	10, cu, ci.-cu, cu.-s, hl, r : o
14	s	s	10, cu, cu.-s	10, cu.-s, ci.-s, n, r
15	w	w	10, ci.-s, r	10, ci.-s. h.-r : 2, cu.-s, ci.-s
16	v	v	9, cu.-s, ci.-s, r	9, cu, cu.-s, n, shs.-hl.-r, t
17	o	o	10, cu.-s, ci.-s	10, cu.-s, n
18	o	o	9, r	9, ci.-cu, ci, ci.-s, r : o
19	P, N, s, g cur	P, N, s, g cur	10, cu, cu.-s : cu, cu.-s, r	10, cu, ci.-cu, h.-r, t : o
20	o	o : s	3, ci.-cu, ci	3, cu, ci.-cu
21	w	w	7, ci.-cu, s	10, s, ci : r
22	o	v	5, cu, ci.-cu, ci.-s	5, cu, ci.-cu, ci : o
23	P, N, ss	P, N, ss	8, cu, ci.-cu, ci, shs.-r	8, shs.-r, t
24	s, g cur	s, g cur	10, ci.-s, r	10, ci.-cu, ci.-s : r
25	w	o	10, ci.-cu, ci.-s, r	7, cu.-s, ci.-s, s, r
26	o	o	5, ci.-cu : 10, cu.-s	2, ci.-cu : 10, s, ci.-s
27	s	s	10, ci.-s	10, ci.-s
28	s	s	7, cu, cu.-s	7, cu, ci.-s : 10, cu, cu.-s
29	v	v	3, ci, ci.-s	3, ci.-cu, ci.-s : 10, ci.-s
30	v	v	2, ci.-cu, ci.-s, li.-cl	2, ci.-cu, ci, li.-cl
31	s	s	o	o : l

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 56°·3 on the 31st; and the lowest was 33°·7 on the 6th.

The mean ,, was 43°·5, being 2°·0 *less* than the average of the preceding 17 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot283$, being $0^{in}\cdot017$ *less* than the average of the preceding 17 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $3^{gr}\cdot2$, being $0^{gr}\cdot2$ *less* than the average of the preceding 17 years.

Degree of Humidity.—The mean for the month was 75 (that of Saturation being represented by 100), being 1 *less* than the average of the preceding 17 years.

Weight of a Cubic Foot of Air.—The mean for the month was 539 grains, being 1 grain *greater* than the average of the preceding 17 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·0.

WIND.

The proportions were of N. 7, S. 8, W. 12, and E. 4.

RAIN.

Fell on 17 days in the month, amounting to $2^{in}\cdot0$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{in}\cdot1$ *greater* than the average fall of the preceding 17 years.

ELECTRICITY.—May 6 to 10. The insulating lamp was out.

MONTH and DAY, 1858.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	WIND AS DEDUCED FROM ANEMOMETERS.						Rain in Inches read at 9h P.M.
			Dry.			Dew Point.	Highest in the Sun, as shewn by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning.						OSLER'S.					WHEWELL'S	
															General Direction.		Pressure in lbs. on the square foot.				
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.	Amount of Horizontal Movement of the Air on each Day.	
		in	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in
June 1	..	29·903	85·0	58·5	70·7	56·5	119·5	44·0	62·7	60·2	14·2	27·9	8·6	+14·3	...	W ; N	0·0	0·0	0·0	15	0·00
2	..	29·888	84·4	54·0	68·1	57·6	104·5	53·7	64·0	60·5	10·5	25·5	7·9	+11·5	Calm ; SE	S	0·0	0·0	0·0	25	0·00
3	..	29·735	81·7	59·3	70·0	60·6	116·4	55·0	65·2	62·2	9·4	16·5	1·7	+13·2	S ; Var.	E ; SW	0·0	0·0	0·0	40	0·00
4	Last Qr.	29·992	77·0	54·1	64·2	52·0	105·5	50·5	63·7	61·2	12·2	21·4	3·0	+ 7·1	SW	SW	0·0	0·0	0·0	35	0·00
5	In Equator	29·888	70·6	53·5	59·4	56·7	81·2	45·7	65·3	63·2	2·7	8·5	1·9	+ 2·3	SW	Var.	0·0	0·0	0·0	15	1·16
6	..	30·026	73·0	54·5	60·3	51·7	91·6	49·4	66·2	63·5	8·6	19·4	6·2	+ 3·1	NE	NE	2·0	0·0	0·0	55	0·00
7	..	29·922	72·0	51·7	59·3	49·8	90·0	..	65·9	63·2	9·5	19·4	6·2	+ 2·0	NE	NE	0·0	0·0	0·0	15	0·00
8	..	29·735	79·8	49·1	63·8	57·1	100·6	51·7	66·0	63·7	6·7	18·3	..	+ 6·4	NE	SW	0·0	0·0	0·0	15	0·01
9	..	29·737	82·9	55·6	68·5	59·0	105·7	..	66·7	64·2	9·5	18·2	1·8	+11·0	SW	Calm	0·0	0·0	0·0	10	0·00
10	..	29·846	80·0	54·8	63·7	59·0	98·0	54·0	67·7	65·2	4·7	19·6	2·5	+ 6·0	E	NE ; Calm	0·0	0·0	0·0	5	0·00
11	New Perigee	29·856	79·8	52·5	65·1	56·1	101·5	45·0	68·2	65·5	9·0	17·9	7·2	+ 7·1	S	Calm	0·0	0·0	0·0	5	0·00
12	Greatest Declination N	29·799	79·0	57·0	66·1	57·2	105·0	52·0	68·7	66·2	8·9	19·4	5·1	+ 7·8	Calm	SW	0·0	0·0	0·0	25	0·00
13	..	29·792	82·5	51·9	66·9	56·7	108·5	44·0	68·7	66·2	10·2	20·7	1·0	+ 8·4	SW	SW	0·0	0·0	0·0	40	0·00
14	..	29·758	88·5	59·4	72·0	61·0	109·7	47·7	69·7	67·2	11·0	23·0	5·1	+13·2	SW	SSW	2·0	0·0	0·1	..	0·00
15	..	29·833	88·5	60·5	73·8	62·1	111·2	47·0	71·4	68·2	11·7	22·1	4·2	+14·8	SW ; SE	E	1·5	0·0	0·3	30	0·00
16	..	29·709	94·5	61·5	76·9	62·3	117·7	47·8	72·4	69·2	14·6	31·5	4·9	+17·6	E	Calm	1·0	0·0	0·1	35	0·00
17	..	29·663	78·6	59·2	64·9	58·2	100·5	51·8	71·4	69·2	6·7	14·6	5·9	+ 5·5	Calm	SW	3·0	0·0	0·4	65	0·00
18	First Quarter In Equator	29·885	70·1	50·3	56·7	53·0	80·0	42·4	71·4	69·7	3·7	9·2	1·8	— 2·8	SW	Calm	0·0	0·0	0·0	5	0·01
19	..	29·980	78·0	48·5	62·6	49·9	103·0	41·5	70·4	68·2	12·7	22·5	1·6	+ 3·0	S	SW	0·0	0·0	0·0	30	0·00
20	..	30·012	77·7	53·1	62·7	56·1	98·8	45·0	70·4	68·2	6·6	20·1	5·1	+ 2·9	SW	SW ; E	0·0	0·0	0·0	15	0·02
21	..	30·166	80·8	51·6	63·3	50·8	105·5	46·0	70·1	67·2	12·5	25·8	1·2	+ 3·4	NE	NE ; SE	0·0	0·0	0·0	10	0·04
22	..	30·180	86·0	55·0	68·4	55·9	112·4	45·5	71·1	69·2	12·5	27·9	9·2	+ 3·4	SW	NNE	0·0	0·0	0·0	25	0·00
23	..	30·155	84·0	54·0	68·3	58·4	105·7	..	71·1	69·7	9·9	24·8	3·6	+ 8·1	Calm	NE ; SE	0·0	0·0	0·0	20	0·00
24	..	30·110	73·2	53·9	60·9	49·6	88·5	..	71·4	69·7	11·3	19·6	8·4	+ 0·5	Calm ; N	NE	3·0	0·0	0·6	60	0·00
25	Apogee Greatest Dec S	30·129	74·2	48·9	61·1	46·9	99·5	50·0	70·4	69·2	14·2	23·4	4·8	+ 0·5	Calm	NW	1·0	0·0	0·0	45	0·00
26	Full	29·887	82·5	51·7	66·9	53·2	110·0	..	69·9	68·2	13·7	24·8	4·2	+ 6·1	SW	W ; NW	3·0	0·0	0·8	105	0·00
27	..	29·928	72·4	55·5	59·6	42·3	91·7	50·4	68·7	64·6	17·3	26·6	10·2	— 1·4	NW	NNW	1·5	0·0	0·3	65	0·00
28	..	29·963	76·5	45·3	60·8	44·9	103·5	35·0	69·9	68·2	15·9	25·7	6·4	— 0·5	Calm	W	2·0	0·0	0·3	90	0·00
29	..	29·987	73·0	50·1	59·6	46·7	98·0	43·2	67·7	66·2	12·9	21·6	3·4	— 1·9	SW ; NW	NNW	1·5	0·0	0·1	40	0·00
30	..	29·978	79·0	51·8	63·4	49·8	104·5	40·8	67·7	64·2	13·6	23·8	5·8	+ 1·9	SW ; NW	NW ; N	1·3	0·0	0·2	75	0·00
Means	..	29·915	79·5	53·9	64·9	54·4	102·3	47·2	68·5	66·0	10·5	21·3	4·8	+ 5·8	...	...	..	..	..	Sum 1015	Sum 1·24

BAROMETER READINGS.

The first minimum in the month was $29^{in}\cdot648$ on the 3rd.

The first maximum in the month was $30^{in}\cdot011$ on the 4th; the second minimum ,, was $29^{in}\cdot859$ on the 5th

The second maximum ,, was $30^{in}\cdot036$ on the 6th; the third minimum ,, was $29^{in}\cdot713$ on the 8th.

The third maximum ,, was $29^{in}\cdot860$ on the 15th; the absolute minimum ,, was $29^{in}\cdot596$ on the 17th.

The absolute maximum ,, was $30^{in}\cdot207$ on the 23rd; the fifth minimum ,, was $29^{in}\cdot849$ on the 26th.

The fifth maximum ,, was $30^{in}\cdot017$ on the 28th.

The range in the month was $0^{in}\cdot611$.

The mean for the month was $29^{in}\cdot915$, being $0^{in}\cdot117$ *higher* than the average of the preceding 17 years.

TEMPERATURE OF THE AIR.

The highest in the month was 94°·5 on the 16th; the lowest was 45°·3 on the 28th; and the range in the month was 49°·2.

The mean ,, of all the highest daily readings was 79°·5, being 8°·6 *higher* than the average of the preceding 17 years.

The mean ,, of all the lowest daily readings was 53°·9, being 4°·0 *higher* than the average of the preceding 17 years.

The mean daily range was 25°·6, being 4°·6 *higher* than the average of the preceding 17 years.

The mean for the month was 64°·9, being 6°·2 *higher* than the average of the preceding 17 years.

MONTH and DAY, 1858.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
June 1	o	o	o, h	o
2	w	w	o	7, ci.-cu, s : oc.-shs : 10, ci.-s, l
3	w	o : w	9, ci.-cu, cu.-s, ci.-s	9, ci.-s : 1, ci.-cu, l
4	w	w	o	o : 7, ci.-cu, ci.-s
5	**P, N,** ss, sps, g cur	**P, N,** ss, sps, g cur	10, t.-s	10, ci.-cu, ci-s, shs.-r, t
6	m	m	9, ci.-cu, ci.-s	9, ci.-cu, ci.-s
7	w	w	7, ci.-cu, ci.-s	7, ci.-cu, ci : o
8	w	w	o	o : 7, cu.-s, ci.-s, t.-s
9	s	s	7, ci.-cu, ci.-s	o : l
10	v	v	10, h	o
11	v	v : sps	10, ci.-s	10, cu, ci.-cu, ci
12	w	w	7, ci.-cu, ci.-s	7, ci.-cu, ci.-s : o
13	w	w	3, ci.-cu, ci	3, ci.-cu, ci : 10, l, r
14	s	s	8, ci.-cu : 2, s	7, s
15	w	w	o	o
16	w	w	o, l	o : 7, ci.-cu, ci.-s, l
17	s	s	10, s, ci.-s, oc.-r	10, ci.-s, oc.-r : o
18	w	w	10, ci.-s	10, ci.-s, h.-shs.-r : o
19	o	o : w	7, ci.-cu, cu.-s	7, ci.-cu, ci.-s : o
20	o	o	10, cu.-s	10, cu.-s, ci.-s : oc.-r
21	o	o	o : 3, li.-cl	3, ci.-cu, ci.-s
22	o	o	o	7, ci.-cu, ci : o
23	o	o	o	10, ci.-cu, ci.-s : o
24	o	o	10, cu, ci.-cu, ci.-s	10, cu, ci.-cu, ci.-s : o, li.-cl
25	w	w	o	o
26	w	w	o	o : 10, ci.-s
27	w	w	9, cu.-s, ci.-s	8, cu.-s, ci.-s : 10, s
28	**P, N,** w	**P, N,** w	o, h	5, ci.-cu, ci : o
29	o	o	10, ci.-cu, ci.-s	5, ci.-cu, ci
30	s	s : w	10, ci.-cu, ci.-s	10, ci.-cu, ci.-s, s : o

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 67°·3 on the 16th; and the lowest was 42°·9 on the 27th.
The mean „ was 54°·4, being 3°·8 *higher* than the average of the preceding 17 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot424$, being $0^{\text{in}}\cdot055$ *greater* than the average of the preceding 17 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $4^{\text{gr}}\cdot6$, being $0^{\text{gr}}\cdot5$ *greater* than the average of the preceding 17 years.

Degree of Humidity.—The mean for the month was 69 (that of Saturation being represented by 100), being 5 *less* than average of the preceding 17 years.

Weight of a Cubic Foot of Air.—The mean for the month was 527 grains, being 4 grains *less* than the average of the preceding 17 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 5·2.

WIND.

The proportions were of N. 7, S. 9, W. 10, and E. 4. The greatest pressure in the month was $3^{\text{lbs}}\cdot0$ on the square foot on the 17th, 24th, and 26th.

RAIN.

Fell on 5 days in the month, amounting to $1^{\text{in}}\cdot2$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{\text{in}}\cdot6$ *less* than the average fall of the preceding 17 years.

MONTH and DAY, 1858.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shewn by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shewn by a Self-Registering thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Osler's. General Direction. P.M.	Osler's. Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 24 Obs.	Whewell's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches read at 9h P.M.
		in	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
July 1	..	29·914	69·6	50·5	56·9	41·5	85·0	49·0	67·2	5· 7	15·4	24·7	8·6	− 4·6	NW	NW	2·5	0·0	0·8	110	0·00
2	..	29·885	71·0	48·3	54·8	46·0	84·0	47·0	66·0	5· 2	8·8	16·0	7·4	− 6·6	N	N	2·0	0·0	0·3	105	0·00
3	In Equator	30·024	62·7	52·2	55·0	44·6	74·0	43·8	65·7	64·4	10·4	16·2	9·2	− 6·4	N	N	2·5	0·0	0·8	85	0·00
4	Last Qr.	29·958	73·0	48·7	58·4	46·4	93·4	46·4	65·7	64·2	12·0	26·3	6·0	− 3·1	N	SW	3·0	0·0	0·3	110	0·04
5	..	29·604	66·0	49·5	56·1	49·6	74·6	50·0	65·0	63·2	6·5	13·3	2·7	− 5·5	SW	NW ; SW	1·5	0·0	0·3	60	0·12
6	..	29·500	70·7	49·9	56·5	45·9	93·2	43·8	64·2	62·7	10·6	23·2	3·4	− 5·2	SW	Calm	1·0	0·0	0·0	20	0·00
7	..	29·516	66·9	47·3	54·2	47·6	80·2	39·0	64·2	62·7	6·6	19·8	4·4	− 7·6	Calm	SW	0·0	0·0	0·0	20	0·20
8	..	29·589	69·6	48·7	55·4	49·3	94·3	44·0	63·2	62·4	6·1	18·9	4·2	− 6·3	SW	NE	2·0	0·0	0·1	55	0·07
9	Greatest Declination N.	29·695	66·0	47·5	54·4	49·6	82·0	..	63·7	61·7	4·8	14·6	1·4	− 7·1	NNE	NE	2·5	0·0	0·5	150	0·40
10	Perigee, New	29·707	70·6	48·5	56·2	52·7	83·0	48·0	62·2	60·5	3·5	12·6	2·2	− 5·3	NNW	N	4·0	0·0	0·8	125	0·57
11	..	29·940	77·6	54·9	64·7	52·2	102·3	52·3	63·2	61·5	12·5	21·4	3·0	+ 3·1	N	NW ; N	0·5	0·0	0·0	40	0·00
12	..	29·937	79·5	51·5	65·2	57·4	102·5	43·0	63·7	61·8	7·8	17·1	2·2	+ 3·5	N ; NW	SW	0·0	0·0	0·0	85	0·00
13	..	29·865	73·5	59·0	64·1	57·0	84·7	54·5	64·2	61·7	7·1	17·9	2·7	+ 2·3	SW	SW	1·0	0·0	0·0	160	0·00
14	..	29·803	80·7	57·5	66·7	58·5	102·4	57·0	64·5	62·4	8·2	19·0	4·0	+ 5·0	SW	S	0·0	0·0	0·0	45	0·00
15	In Equator	29·672	88·2	58·5	73·5	59·5	111·1	51·0	66·2	63·4	14·0	25·3	1·0	+ 11·8	SE	S ; Calm	3·5	0·0	0·0	60	0·00
16	..	29·750	75·2	60·5	64·5	59·8	83·0	45·0	67·0	64·5	4·7	13·3	0·7	+ 2·6	Calm ; N	W	3·0	0·0	0·0	15	0·61
17	First Qr.	29·872	79·7	57·0	66·1	54·8	90·0	..	67·0	64·2	11·3	25·8	5·2	+ 4·4	Calm	SW	0·0	0·0	0·0	35	0·00
18	..	29·954	78·0	52·1	62·8	54·4	91·3	43·0	69·2	64·2	8·4	15·3	3·8	+ 1·1	S	SW	2·5	0·0	0·3	55	0·09
19	..	29·962	77·2	50·7	62·8	53·3	103·6	41·0	69·2	64·7	9·5	18·5	2·7	+ 1·1	SW	N	0·0	0·0	0·0	10	0·00
20	..	29·756	78·0	51·7	64·6	51·8	102·0	44·0	70·4	66·2	12·8	21·6	5·2	+ 3·0	SSW	SE	2·5	0·0	0·2	70	0·00
21	..	29·661	73·8	56·7	60·7	49·0	90·2	44·5	69·2	65·2	11·7	21·1	4·6	− 0·8	NW	SW	3·5	0·0	0·8	110	0·00
22	Apogee	29·808	74·5	49·3	60·6	52·9	101·8	41·0	69·2	64·7	7·7	19·6	1·0	− 0·9	SW	S	3·0	0·0	0·5	70	0·03
23	Greatest Declination S.	29·771	79·2	57·5	65·7	55·0	105·5	56·5	69·2	66·2	10·7	19·2	2·0	+ 4·2	SW ; W	SW	2·0	0·0	0·0	60	0·00
24	..	29·559	71·9	54·9	62·9	58·1	92·7	52·5	69·3	66·2	4·8	11·0	1·0	+ 1·3	S	S ; SW	4·5	0·0	0·8	255	0·25
25	..	29·440	74·3	53·1	60·7	47·7	90·0	49·8	69·2	64·7	13·0	20·7	11·0	− 1·1	SW	WSW	15·0	0·0	6·6	160	0·00
26	Full	29·789	74·0	51·3	60·5	48·2	97·5	42·0	68·7	64·7	12·3	20·5	8·4	− 1·6	SW	W ; SW	2·0	0·0	0·0	15	0·00
27	..	29·637	73·5	51·3	61·3	51·8	96·4	42·3	69·3	64·2	9·5	19·4	2·7	− 1·0	SW ; SE	SE	2·2	0·0	0·0	80	0·17
28	..	29·767	70·6	53·3	58·6	50·6	81·8	57·0	68·2	62·2	8·0	16·2	2·7	− 2·9	NE	NNE	3·0	0·0	0·3	70	0·4
29	..	29·894	71·0	43·8	56·3	47·8	90·8	44·0	66·3	63·2	8·5	19·1	3·1	− 6·2	NNW	N	0·0	0·0	0·0	20	0·00
30	In Equator	29·956	74·8	44·0	60·0	47·2	97·8	..	65·7	63·2	12·8	24·7	3·5	− 2·5	NW	NW	0·5	0·0	0·0	15	0·00
31	..	30·028	78·2	48·1	60·1	49·6	99·7	39·0	65·9	63·7	10·5	21·4	5·3	− 2·4	NW	N ; SE	0·0	0·0	0·0	110	0·00
Means	..	29·781	73·9	51·9	60·7	51·3	92·3	46·8	66·5	63·7	9·4	19·2	4·0	− 1·1	...	...	..	..	..	Sum 2380	Sum 2·97

BAROMETER READINGS.

The first minimum in the month was $29^{in}\cdot869$ on the 2nd.

The absolute maximum in the month was $30^{in}\cdot073$ on the 3rd; the second minimum ,, was $29^{in}\cdot473$ on the 6th.

The second maximum ,, was $29^{in}\cdot968$ on the 12th; the third minimum ,, was $29^{in}\cdot659$ on the 15th.

The third maximum ,, was $30^{in}\cdot002$ on the 19th; the fourth minimum ,, was $29^{in}\cdot597$ on the 21st.

The fourth maximum ,, was $29^{in}\cdot820$ on the 22nd; the absolute minimum ,, was $29^{in}\cdot311$ on the 25th.

The fifth maximum ,, was $29^{in}\cdot814$ on the 26th; the sixth minimum ,, was $29^{in}\cdot569$ on the 27th.

The range in the month was $0^{in}\cdot762$.

The mean for the month was $29^{in}\cdot781$, being $0^{in}\cdot015$ *lower* than the average of the preceding 17 years.

TEMPERATURE OF THE AIR.

The highest in the month was 88°·2 on the 15th; the lowest was 43°·8 on the 29th; and the range in the month was 44°·4.

The mean ,, of all the highest daily readings was 73°·9, being 0°·3 *higher* than the average of the preceding 17 years.

The mean ,, of all the lowest daily readings was 51°·9, being 1°·3 *lower* than the average of the preceding 17 years.

The mean daily range was 22°·0, being 1°·6 *higher* than the average of the preceding 17 years.

The mean for the month was 60°·7, being 1°·0 *lower* than the average of the preceding 17 years.

MONTH and DAY, 1858.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
July 1	N, w	N, w	10, cu, ci.-cu, ci.-s	10, cu, ci.-cu, ci.-s : o
2			10, ci.-s, shs.-r	10, ci.-s, shs.-r. : cu.-s, s
3			10, cu-s, ci.-s. oc.-r	10, ci.-cu, ci.-s
4			7, ci.-cu, ci	7, ci.-cu, ci.-s : 10, ci.-s, l
5			10, r : gt.-glm	10, cu.-s, ci.-s
6	w	N, v : w	10, cu.-s, ci.-s : shs.-r	10,cu.-s, ci.-s
7	v : N w	v	10, ci.-cu, s, r	10, cu.-s, ci.-s, l : h.-r, l, t
8	s s	N, s, sps, g cur : w	7, ci.-cu, ci.-s, h.-r	10, t, h.-r : 7, ci.-s
9	o	s, sps, g cur : N	10, cu, ci.-cu, ci	10, cu.-s, ci.-s, r
10	o	o	10, fr.-shs	10, h.-r : h.-r
11	w	w	3, ci.-cu	3, ci.-cu, ci
12	v	v	7, cu, ci.-cu, ci	10, ci.-cu, ci.-s
13	o	v	10, ci.-cu, cu.-s, ci.-s	7, cu.-s, ci.-s
14	v	v	10, cu.-s, ci.-s : 2, ci	2, ci
15	w	w	5, ci	5, ci.-s : 10 : t.-s
16	s	s, sps, g cur	10, ci.-cu, ci.-s	10, h.-r, t : 9, s, ci.-s
17	o	o : w	10, h : 2, ci	o
18	s	s	10, h.-shs.-r	3, ci
19	v	v	10, ci.-s	8, cu, ci.-cu : 2, ci : o
20	m	m	2, ci	2, ci : 10, ci.-s
21	o	o : w	10, ci.-cu, ci.-s, sl.-r	7, ci.-cu, ci.-s : o
22	o	o	10, ci.-cu, ci.-s	10, cu, cu.-s, sl.-r 10, r
23	o	o : w	10, ci-cu, ci.-s, sl.-r	10, ci.-cu, ci.-s
24	o	o	10, r : 7, ci.-cu, ci.-s	10, oc.-shs-r
25			7, st.-w	7, st.-w : o
26			9, ci-cu, ci.-s	9, ci.-cu, ci.-s : o
27			3, ci	10, ci.-cu, ci.-s, r
28			10, r : 10, ci.-cu, ci.-s	7, ci.-cu, ci.-s : o
29			10, ci.-cu, ci.-s	10, cu.-s, ci.-s : 5, ci.-cu, ci.-s
30			o : 3, ci.-cu	7, ci.-cu, ci.-s
31			o, f : 7, cu, ci.cu, ci	2, ci.-cu, ci.-s : o

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was $62^{\circ}\cdot 5$ on the 16th; and the lowest was $40^{\circ}\cdot 1$ on the 1st.

The mean ,, was $51^{\circ}\cdot 3$, being $2^{\circ}\cdot 6$ *less* than the average of the preceding 17 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot 378$, being $0^{in}\cdot 039$ *less* than the average of the preceding 17 years.

Weight of Vapour in a Cubic Foot of Air.**—The mean for the month was $4^{gr}\cdot 2$, being $0^{gr}\cdot 4$ *less* than the average of the preceding 17 years.**

Degree of Humidity.—The mean for the month was 71 (that of Saturation being represented by 100), being 5 *less* than the average of the preceding 17 years.

Weight of a Cubic Foot of Air.—The mean for the month was 529 grains, being 2 grains *greater* than the average of the preceding 17 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·0.

WIND.

The proportions were of N. 10, S. 11, W. 7, and E. 3. The greatest pressure in the month was $15^{lbs}\cdot 0$ on the square foot on the 25th.

RAIN.

Fell on 12 days in the month, amounting to $3^{in}\cdot 0$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{in}\cdot 4$ *greater* than the average [illegible] of the preceding 17 years.

ELECTRICITY.—July 2 to 5. The insulating lamp was not burning. July 25. The electrometer pole was broken during a heavy gale and other parts of the apparatus injured: it was not in working order again till November 14.

MONTH and DAY, 1858.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shewn by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest.	Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Greatest.	Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	P.M.	Pressure in lbs. on the square foot. Greatest.	Least.	Mean of 24 Obs.	Whewell's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches read at 9h P.M.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
Aug. 1	..	30·117	76·4	48·5	60·8	50·2	100·0	40·5	66·7	64·2	10·6	23·8	2·3	− 1·7	Calm	E	2·0	0·0	0·1	105	0·00
2	Last Qr.	29·902	74·5	45·1	59·7	48·9	99·7	34·0	66·7	64·2	10·8	22·1	1·5	− 2·6	SE	ESE	1·0	0·0	0·0	15	0·00
3	..	29·685	80·9	53·5	64·7	50·8	..	..	66·7	64·2	13·9	24·1	5·4	+ 2·5	Calm ; SSE	SW	3·5	0·0	0·5	15	0·01
4	..	29·813	79·7	51·5	62·7	52·3	103·3	39·2	67·2	64·7	10·4	23·9	2·2	+ 0·6	SW	SW	3·0	0·0	0·6	..	0·00
5	Greatest Declination N.	29·855	79·7	58·7	66·7	51·0	104·7	58·0	68·3	65·2	15·7	25·5	4·0	+ 4·7	SW	SW	2·5	0·0	0·8	..	0·03
6	..	30·049	76·0	50·1	61·1	46·7	102·0	45·0	67·9	65·2	14·4	22·1	2·1	− 0·9	SW ; NW	NNW	2·0	0·0	0·3	..	0·00
7	Perigee	30·245	78·0	47·2	60·8	50·1	100·5	38·0	67·5	64·2	10·7	24·1	4·9	− 1·2	Calm	E	0·0	0·0	0·0	..	0·00
8	..	30·232	76·0	46·5	60·4	51·3	97·5	39·0	67·2	64·2	9·1	23·1	1·2	− 1·6	NE	E ; NE	1·0	0·0	0·0	..	0·00
9	New	30·070	80·8	47·5	63·7	51·7	102·9	36·4	67·2	64·2	12·0	24·3	1·6	+ 1·8	NE	NE	1·0	0·0	0·0	..	0·00
10	..	29·877	81·6	56·5	65·8	60·7	102·4	37·8	67·2	64·2	5·1	14·3	0·6	+ 4·0	N	NE	0·0	0·0	0·0	..	0·20
11	..	29·853	82·2	59·3	67·6	60·4	102·5	53·0	67·3	64·2	7·2	16·8	1·0	+ 5·9	N	E ; ESE	0·0	0·0	0·0	..	0·00
12	In Equator	29·837	86·9	56·1	71·8	60·0	108·5	47·3	67·9	65·7	11·8	25·2	1·0	+10·2	ESE ; NNE	S ; N	1·0	0·0	0·0	..	0·00
13	..	29·830	82·2	55·5	66·5	52·9	107·6	35·0	68·9	66·2	13·6	29·2	4·4	+ 5·0	N ; SW	NW	0·0	0·0	0·0	..	0·00
14	..	29·748	78·5	55·7	62·1	56·8	98·5	46·7	69·5	66·2	5·3	13·3	1·3	+ 0·6	NE	Calm	3·0	0·0	0·0	..	0·69
15	..	29·877	74·4	54·5	62·4	53·8	94·5	51·2	69·3	66·2	8·6	19·6	3·0	+ 1·0	WSW	SW	2·0	0·0	0·2	..	0·00
16	First Qr.	29·870	73·7	55·2	63·5	52·4	92·4	53·5	69·0	66·2	11·1	17·2	2·8	+ 2·1	SW	SSW ; SSE	3·0	0·0	0·3	..	0·00
17	..	29·600	83·0	54·1	67·5	53·8	104·0	46·5	69·0	66·2	13·7	24·1	6·7	+ 6·2	SE	SSW	2·5	0·0	0·1	..	0·02
18	..	29·547	78·9	60·4	67·0	56·5	99·1	37·9	69·0	65·7	10·5	23·8	1·9	+ 5·9	Calm	SE	0·0	0·0	0·0	..	0·04
19	Greatest Dec. S. Apogee.	29·583	79·4	59·1	67·3	55·3	104·6	41·3	69·0	66·2	12·0	23·1	3·4	+ 6·4	SW	SW	1·5	0·0	0·0	..	0·10
20	..	29·701	69·7	57·3	60·7	49·7	75·0	52·2	69·4	66·2	11·0	18·2	7·2	− 0·1	NW	NW	2·5	0·0	0·4	..	0·00
21	..	29·647	61·4	47·8	54·8	53·9	62·0	32·2	68·8	66·2	0·9	3·8	0·0	− 5·8	SW ; NW	NNW	7·0	0·0	1·5	..	0·44
22	..	29·800	72·2	52·9	60·8	52·0	92·8	44·8	67·4	64·8	8·8	17·3	2·2	+ 0·4	ENE	NE ; E	2·0	0·0	0·0	..	0·00
23	..	29·925	75·6	48·6	62·4	55·4	97·4	39·8	67·4	64·8	7·0	18·5	3·2	+ 2·1	NNE	E ; NE	0·0	0·0	0·0	..	0·00
24	Full	29·988	77·0	52·5	63·0	53·8	102·5	..	67·4	64·7	9·2	18·2	2·2	+ 2·7	N	N ; S	0·0	0·0	0·0	..	0·00
25	..	29·876	72·8	51·5	58·6	50·0	95·2	..	67·3	64·7	8·6	19·1	4·2	− 1·6	NW	N	3·8	0·0	0·3	..	0·00
26	In Equator	29·930	68·0	47·7	56·9	43·3	91·2	39·3	67·2	63·7	13·6	20·7	5·5	− 3·0	NNW	NW ; SW	3·0	0·0	0·8	..	0·00
27	..	29·751	67·5	53·3	57·6	44·6	83·5	46·7	66·8	62·7	13·0	17·8	9·2	− 2·1	SW ; NW	NW ; W	3·0	0·0	0·8	..	0·00
28	..	29·627	68·7	48·6	55·3	43·0	87·0	47·0	65·3	61·7	12·3	22·1	4·6	− 4·3	W ; NW	NW ; SW	2·5	0·0	0·4	..	0·00
29	..	29·632	69·0	43·3	56·2	49·8	90·0	34·0	..	..	6·4	17·8	2·8	− 3·2	SW	SW	3·0	0·0	0·4	120	0·00
30	..	29·557	69·5	51·8	57·9	44·3	91·5	43·8	..	..	13·6	20·5	7·6	− 1·2	SW	SW	4·5	0·0	1·0	220	0·00
31	Last Qr.	29·590	70·5	45·5	56·8	45·1	97·0	37·5	..	..	11·7	21·8	4·6	− 2·2	SW	SW	3·0	0·0	0·5	120	0·00
Means	..	29·826	75·6	52·1	62·0	51·6	96·3	42·8	67·8	64·9	10·4	20·5	3·4	+ 1·0	...	...	..	..	..	sum 595	sum 1·53

BAROMETER READINGS.

The first maximum in the month was 30^{in}·136 on the 1st; the first minimum in the month was 29^{in}·670 on the 3rd.
The absolute maximum ,, was 30^{in}·264 on the 7th; the second minimum ,, was 29^{in}·718 on the 14th.
The third maximum ,, was 29^{in}·919 on the 16th; the absolute minimum ,, was 29^{in}·505 on the 18th.
The fourth maximum ,, was 29^{in}·769 on the 20th; the fourth minimum ,, was 29^{in}·525 on the 21st.
The fifth maximum ,, was 30^{in}·026 on the 24th; the fifth minimum ,, was 29^{in}·530 on the 30th.
The range in the month was 0^{in}·759. The mean for the month was 29^{in}·826, being 0^{in}·029 *higher* than the average of the preceding 17 years.

TEMPERATURE OF THE AIR.

The highest in the month was 86°·9 on the 12th; the lowest was 43°·3 on the 29th; and the range in the month was 43°·6.
The mean ,, of all the highest daily readings was 75°·6, being 2°·9 *higher* than the average of the preceding 17 years.
The mean ,, of all the lowest daily readings was 52°·1, being 1°·4 *lower* than the average of the preceding 17 years.
The mean daily range was 23°·5, being 4°·2 *higher* than the average of the preceding 17 years.
The mean for the month was 62°·0, being 0°·6 *higher* than the average of the preceding 17 years.

MONTH and DAY, 1858.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Aug. 1			7, ci.-cu, ci	7, cu, ci.-cu : 0
2			0	0 : 7, s, ci.-s
3			3, ci.-cu, ci	10, r : 7, ci.-cu
4			10, cu.-s	10, ci.-cu, cu.-s : shs.-r
5			10, cu.-s, ci.-s : 0	0
6			2, ci.-cu, cu.-s	2, cu, ci.-cu
7			0 5	5, cu, ci.-cu, ci : 0
8			5, cu, ci.-cu : 0	0
9			3, ci.-cu : 0	0
10			10, r	10, cu.-s, ci.-s : 7, cu : l
11			10, ci.-s	10, ci.-cu : 0 : l
12			7, ci.-cu	7, cu.-s, ci.-s, t : l
13			5, s, ci	0 : l
14			10, ci.-s, oc.-r	10, shs.-r : gt.-glm, l, t, r : 10
15			10, oc.-r	3, ci.-cu, ci
16			5, ci.-cu, cu.-s	10, cu.-s, ci.-s : 0
17			5	10, ci.-cu : r
18			10, r	5, ci.-cu : 10, r, l
19			5, ci.-cu	3, cu, ci.-cu
20			10, r	2, ci.-cu
21			10, r	10, r
22			7, cu, li.-cl	7, cu, li.-cl : 0
23			0 8	8, cu, cu.-s : 0
24			0	0 : 7, s, ci, li.-cl
25			10, ci.-cu, ci.-s	10, ci.-cu, ci.-s : 0
26			5, ci.-cu, ci	5, ci.-cu, ci : 0
27			10, ci.-cu, cu.-s	10, cu.-s, ci.-s : 7 : 0
28			10, cu, ci.-cu, shs.-r : 7	7, cu.-s, ci.-s : 0
29			7, ci.-cu, ci.-s	7, ci.-cu, ci.-s : 0
30			7, ci.-cu, ci.-s, r	5, cu, ci.-cu : l
31			3, ci.-cu, ci	10, cu.-s, ci.-s

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 64°·6 on the 12th; and the lowest was 43°·5 on the 30th.

The mean ,, was 51°·6, being 2°·7 *less* than the average of the preceding 17 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot382$, being $0^{\text{in}}\cdot044$ *less* than the average of the preceding 17 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $4^{\text{gr}}\cdot2$, being $0^{\text{gr}}\cdot6$ *less* than the average of the preceding 17 years.

Degree of Humidity.—The mean for the month was 69 (that of Saturation being represented by 100), being 9 *less* than the average of the preceding 17 years.

Weight of a Cubic Foot of Air.—The mean for the month was 529 grains, being 1 grain *greater* than the average of the preceding 17 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 5·1.

WIND.

The proportions were of N. 9, S. 7, W. 8, and E. 7. The greatest pressure in the month was 7^{lbs} on the square foot on the 21st.

RAIN.

Fell on 8 days in the month, amounting to $1^{\text{in}}\cdot5$ as measured in the simple cylinder gauge partly sunk below the ground; being $1^{\text{in}}\cdot0$ *less* than the average fall of the preceding 17 years.

MONTH and DAY, 1858.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	Wind as deduced from Anemometers.						Rain in Inches read at 9h P.M.
			Dry.			Dew Point.	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning.						Osler's.					Whewell's.	
															General Direction.		Pressure in lbs. on the square foot.				
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.	Amount of Horizontal Movement of the Air on each Day.	
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Sept. 1	..	29·564	71·4	49·7	58·8	51·4	92·0	40·3	62·9	60·7	7·4	17·6	5·1	0·0	SSW	W	5·0	0·0	1·0	150	0·00
2	Greatest Declination N.	29·722	69·3	46·5	58·0	49·2	88·4	37·0	61·7	59·2	8·8	15·7	5·5	− 0·6	SSW	SW	3·5	0·0	1·5	230	0·00
3	..	29·668	74·0	57·7	65·2	58·8	99·0	55·0	62·7	59·5	6·4	12·2	1·0	+ 6·7	SW	SW	8·0	0·0	2·0	220	0·04
4	Perigee	29·656	67·8	60·7	62·7	58·4	75·0	48·0	62·7	61·0	4·3	6·8	0·6	+ 4·3	SW	SSW	7·0	0·0	2·3	210	0·15
5	..	29·655	71·0	52·7	56·8	49·3	87·0	47·3	62·7	61·2	7·5	20·5	3·0	− 1·4	SW	SW	4·5	0·0	0·0	115	0·21
6	..	29·706	66·2	45·5	55·4	48·4	84·8	36·7	63·2	61·2	7·0	14·6	2·3	− 2·6	WSW	SSW	3·0	0·0	0·4	165	0·00
7	New	29·684	66·8	52·7	57·6	51·5	87·7	46·4	61·7	60·7	6·1	13·5	4·6	− 0·2	SW	SW	2·5	0·0	0·3	30	0·04
8	In Equator	29·776	72·0	54·3	61·4	53·4	85·5	34·0	62·2	60·7	8·0	15·1	5·2	+ 3·7	SSW	NNW	1·5	0·0	0·0	85	0·05
9	..	29·862	73·0	47·5	59·2	53·0	94·5	46·6	62·2	60·7	6·2	18·7	2·5	+ 1·6	Calm	SW	2·5	0·0	0·5	165	0·00
10	..	29·824	70·8	57·5	62·6	55·5	82·0	54·0	62·7	60·2	7·1	12·1	2·7	+ 5·1	SW	SW	8·0	0·0	1·0	175	0·00
11	..	30·034	70·9	58·1	62·9	57·8	79·1	52·1	62·0	61·5	5·1	11·3	2·9	+ 5·5	SW	S	1·0	0·0	0·0	40	0·00
12	..	30·019	83·8	48·7	65·3	56·8	105·0	43·0	63·7	61·2	8·5	24·3	0·6	+ 8·0	Calm	SE; E	0·0	0·0	0·0	35	0·00
13	..	29·942	83·1	50·5	65·9	57·2	102·0	41·9	64·2	62·4	8·7	22·6	3·8	+ 8·7	NE	E	0·0	0·0	0·0	40	0·00
14	..	30·024	81·0	53·3	64·6	56·5	101·7	45·3	64·7	62·7	8·1	23·1	3·2	+ 7·6	Calm; NE	NE	2·5	0·0	0·0	55	0·00
15	Greatest Dec. S First Quarter.	30·030	75·0	54·3	62·6	54·1	96·0	47·0	65·2	63·2	8·5	18·0	2·3	+ 5·9	NE	E	0·0	0·0	0·0	35	0·00
16	Apogee	29·899	78·0	52·4	63·4	57·8	96·5	45·0	65·0	63·2	5·6	17·7	1·3	+ 6·9	E	ENE	2·0	0·0	0·0	55	0·00
17	..	29·589	72·8	54·7	62·9	59·5	81·8	49·3	64·7	63·2	3·4	13·7	0·4	+ 6·6	Calm	SE	2·3	0·0	0·0	105	0·03
18	..	29·899	69·4	52·3	58·7	47·1	91·5	45·6	64·7	63·2	11·6	18·0	7·2	+ 2·7	SW	SW; S	3·0	0·0	0·1	40	0·10
19	..	29·932	62·0	44·9	53·9	53·4	75·0	33·8	64·7	62·4	0·5	5·5	0·0	− 2·0	Calm	NE	2·5	0·0	0·3	50	0·17
20	..	30·060	66·0	55·2	59·0	56·1	73·0	53·2	64·5	62·0	2·9	7·9	0·6	+ 3·4	SW; Calm	Calm; NE	0·0	0·0	0·0	35	0·00
21	..	30·008	67·7	55·2	59·0	51·6	74·6	50·0	63·9	62·2	7·4	16·0	4·8	+ 3·5	NE	NE	3·5	0·0	0·8	150	0·00
22	In Equator	29·593	72·2	56·8	62·7	58·6	79·2	52·0	63·2	62·0	4·1	9·1	3·6	+ 7·3	NE	ENE; SSE	2·8	0·0	0·7	125	0·03
23	Full	29·530	70·7	58·9	63·2	54·6	85·0	52·0	62·2	61·5	8·6	13·1	4·8	+ 7·9	S	SW	9·0	0·0	2·6	215	0·00
24	..	30·092	67·2	49·9	56·9	46·8	83·0	49·0	62·7	61·6	10·1	15·4	8·2	+ 1·9	W	NNW	3·0	0·0	0·8	100	0·00
25	..	30·380	68·7	41·5	55·2	47·0	92·0	34·0	62·7	60·2	8·2	19·1	4·6	+ 0·3	Calm	Calm	0·0	0·0	0·0	65	0·00
26	..	30·297	67·5	47·5	56·9	53·3	77·5	48·0	61·7	59·2	3·6	12·4	2·3	+ 2·2	SW	Calm	0·0	0·0	0·0	25	0·00
27	..	30·120	66·0	56·1	59·3	51·1	73·5	54·0	62·2	59·7	8·2	11·6	3·6	+ 4·8	Calm	SW	0·0	0·0	0·0	75	0·00
28	..	30·059	60·2	53·5	56·9	53·8	62·0	55·0	61·7	59·4	3·1	5·1	1·7	+ 2·6	SW	Calm	0·0	0·0	0·0	30	0·00
29	Greatest Dec. N. Perigee	29·784	71·8	55·3	61·6	54·9	85·0	51·8	61·2	59·2	6·7	15·8	2·9	+ 7·6	Calm; SE	E; SE	0·0	0·0	0·0	65	0·00
30	Last Qr.	29·549	70·5	52·5	59·2	52·3	85·0	52·0	61·7	60·2	6·9	14·2	1·9	+ 5·4	SW	NW	4·0	0·0	0·0	155	0·06
Means	..	29·865	70·9	52·6	60·3	53·6	85·8	46·6	63·0	61·2	6·6	14·7	3·1	+ 3·8	...	...	..	..	..	Sum 3040	Sum 0·88

BAROMETER READINGS.

The first maximum in the month was 30$^{\text{in}}$·060 on the 14th; the first minimum in the month was 29$^{\text{in}}$·510 on the 17th.

The second maximum ,, was 30$^{\text{in}}$·093 on the 20th; the second minimum ,, was 29$^{\text{in}}$·497 on the 23rd.

The absolute maximum ,, was 30$^{\text{in}}$·416 on the 25th; the absolute minimum ,, was 29$^{\text{in}}$·466 on the 30th.

The range in the month was 0$^{\text{in}}$·950.

The mean for the month was 29$^{\text{in}}$·865, being 0$^{\text{in}}$·027 *higher* than the average of the preceding 17 years.

TEMPERATURE OF THE AIR.

The highest in the month was 83°·8 on the 12th; the lowest was 41°·5 on the 25th.

The range ,, was 42°·3.

The mean ,, of all the highest daily readings was 70°·9, being 3°·4 *higher* than the average of the preceding 17 years.

The mean ,, of all the lowest daily readings was 52°·6, being 3°·7 *higher* than the average of the preceding 17 years.

The mean daily range was 18°·3, being 0°·3 *lower* than the average of the preceding 17 years.

The mean for the month was 60°·3, being 3°·4 *higher* than the average of the preceding 17 years.

MONTH and DAY, 1858.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Sept. 1			10, ci.-cu ci.-s	10, ci.-cu, ci.-s, oc.-r : 0
2			7, ci.-s	10, ci.-cu, cu.-s, ci.-s
3			5, s, ci, sc, sl.-r : 10	10, ci.-s, sc : r
4			10	10, m.-r : h-r
5			10, f	5, ci.-s : 10, t, r : 0, l
6			10	10, cu, ci.-cu, ci.-s : 0
7			10, cu.-s, ci.-s	10, cu.-s, ci.-s, oc.-r
8			10, r, ci.-cu, ci.-s	5, cu.-s, ci.-s : h
9			5, ci.-cu, ci : 0	10, cu.-s, ci.-s : m.-r
10			10, ci.-cu, cu.-s, ci.-s	10, cu.-s, ci.-s
11			10	10, ci.-cu, ci.-s : 5, ci
12			0, h	0
13			0	0
14			0	0 : 10, ci.-cu, cu.-s, ci.-s
15			10, ci.-cu, cu.-s, ci.-s : 0	0
16			5 : 0	0
17			10, oc.-r	10, oc.-r : 5 h.-r, l
18			3, ci.-cu, ci	10, ci.-cu, cu-s, ci.-s : 0
19			10, h : r	10, r
20			10, f	10 : 5, cu.-s, s, lu.-cor
21			10, cu.-s, ci.-s	5, ci.-cu, ci.-s : 10, ci.-cu, ci.-s
22			10, cu.-s, ci.-s, oc.-r	10, ci.-cu, ci.-s
23			10, ci.-cu, ci.-s	10, ci.-cu, cu.-s ci.-s : m.-r
24			0	5, ci.-cu, ci.-s : 0
25			2, ci	2, ci
26			10, h	10, ci.-cu, ci.-s
27			10, h	10, ci.-cu, cu.-s, ci.-s : 0
28			10, f	10
29			5, ci.-cu. ci.-s	5, ci.-cu, ci : 10, r
30			10, r	3, ci.-cu, cu.-s

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 61°·9 on the 17th; and the lowest was 42°·2 on the 24th.
The mean ,, was 53°·6, being 2°·6 *higher* than the average of the preceding 17 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot412$, being $0^{in}\cdot029$ *greater* than the average of the preceding 17 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $4^{gr}\cdot6$, being $0^{gr}\cdot4$ *greater* than the average of the preceding 17 years.

Degree of Humidity.—The mean for the month was 78 (that of Saturation being represented by 100), being 3 *less* than the average of the preceding 17 years.

Weight of a Cubic Foot of Air.—The mean for the month was 531 grains, being 3 grains *less* than the average of the preceding 17 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·1.

WIND.

The proportions were of N. 3, S. 10, W. 10, and E. 7. The greatest pressure in the month was $9^{lbs}\cdot0$ on the square foot on the 23d.

RAIN.

Fell on 10 days in the month, amounting to $0^{in}\cdot9$, as measured in the simple cylinder gauge partly sunk below the ground; being $1^{in}\cdot3$ *less* than the average fall of the preceding 17 years.

MONTH and DAY, 1858.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	WIND AS DEDUCED FROM ANEMOMETERS.						Rain in Inches read at 9h P.M.
			Dry.			Dew Point.	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9h. A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning.						OSLER'S.					WHEWELL'S	
															General Direction.		Pressure in lbs. on the square foot.			Amount of Horizontal Movement of the Air on each Day.	
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.		
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
Oct. 1	..	29·892	65·4	40·1	52·5	44·4	88·1	31·0	60·7	59·2	8·1	20·3	4·8	— 1·0	SW	SW	3·5	0·0	0·3	205	0·00
2	..	29·894	67·5	49·8	57·1	48·5	87·0	43·2	60·7	59·2	8·6	19·6	4·2	+ 3·7	SW	SW	3·5	0·0	1·2	260	0·00
3	..	29·870	69·5	49·7	57·7	49·4	88·1	42·0	60·2	58·2	8·3	14·4	7·0	+ 4·6	SW	SW	5·0	0·0	2·0	90	0·00
4	..	29·758	69·0	52·5	58·7	48·9	82·2	45·0	60·2	58·4	9·8	18·1	4·2	+ 5·7	SSW	SSW	4·0	0·0	1·5	155	0·00
5	In Equator	29·687	62·8	43·2	50·6	44·1	81·0	39·0	59·7	57·4	6·5	10·8	4·4	— 2·2	SW	SW	6·0	0·0	1·5	175	0·25
6	..	29·878	60·5	39·5	48·8	41·6	75·2	41·5	58·7	57·2	7·2	13·4	6·7	— 3·7	WSW	W ; SW	2·0	0·0	0·5	180	0·00
7	New	29·247	64·0	44·7	53·7	51·9	70·0	42·5	56·7	56·2	1·8	6·1	1·4	+ 1·4	SW	W by S	14·0	0·0	3·5	205	0·19
8	..	29·594	57·5	41·3	47·6	38·1	68·0	39·0	58·7	57·2	9·5	17·0	3·1	— 4·5	Var.	NW ; Calm	2·0	0·0	0·1	75	0·09
9	..	29·761	61·0	35·4	47·9	42·6	79·5	30·0	57·7	57·2	5·3	14·8	1·7	— 4·0	WSW	SSW	2·5	0·0	0·2	160	0·00
10	..	29·341	57·2	42·3	50·5	43·8	68·2	41·2	57·7	56·2	6·7	13·2	2·0	— 1·2	SSW	SW ; Calm	10·0	0·0	3·0	145	0·10
11	..	29·494	57·8	40·1	46·3	41·2	73·8	36·5	56·7	55·2	5·1	11·2	2·3	— 5·1	Var.	WNW; W	0·0	0·0	0·0	95	0·00
12	Greatest Declination S.	29·864	60·5	39·7	48·6	41·4	77·0	35·0	57·7	56·2	7·2	14·2	5·3	— 2·4	W	W ; SW	2·0	0·0	0·0	185	0·00
13	Apogee	29·904	63·7	47·5	55·8	54·8	66·0	45·0	56·7	55·2	1·0	3·2	0·0	+ 5·3	SW ; W	Calm	5·0	0·0	2·0	120	0·03
14	..	30·052	63·0	52·5	57·5	56·1	64·9	48·0	57·7	56·2	1·4	4·4	1·3	+ 7·4	Calm ; W	WSW	0·0	0·0	0·0	105	0·04
15	First Qr.	29·898	67·1	51·5	56·8	55·1	78·1	50·2	57·7	56·2	1·7	7·0	0·4	+ 7·0	Calm ; SW	SW	0·0	0·0	0·0	55	0·00
16	..	29·644	69·0	44·6	55·9	53·4	83·8	38·2	57·7	56·2	2·5	12·2	0·4	+ 6·3	Calm	SW ; W	0·0	0·0	0·0	75	0·00
17	..	29·703	61·7	46·3	51·3	48·1	66·0	45·3	57·7	56·2	3·2	7·0	1·1	+ 1·9	W	WNW ; NE	0·0	0·0	0·0	40	0·00
18	..	29·586	50·2	43·2	47·1	46·5	60·1	36·0	57·7	56·2	0·6	2·3	0·4	— 2·1	ENE	ENE	3·0	0·0	0·7	150	0·24
19	..	29·488	56·7	47·7	52·5	51·5	57·2	45·5	55·7	54·2	1·0	2·2	0·1	+ 3·4	ENE ; E	ESE	9·0	0·0	2·5	105	0·14
20	In Equator	29·528	59·4	49·7	53·9	52·5	61·3	48·2	57·2	55·2	1·4	4·2	1·3	+ 4·8	E	E	0·0	0·0	0·0	35	0·00
21	..	29·747	61·5	43·6	51·2	50·0	72·8	38·0	57·7	56·2	1·2	6·4	0·0	+ 2·3	Calm	ESE	0·0	0·0	0·0	30	0·00
22	Full	29·904	61·0	46·0	50·9	47·1	75·0	..	57·7	56·2	3·8	9·8	0·2	+ 2·3	NE	E ; Calm	0·0	0·0	0·0	40	0·00
23	..	29·901	61·0	43·5	50·8	49·2	68·0	38·2	57·7	56·2	1·6	6·5	0·6	+ 2·5	NE ; ESE	ESE; ENE	0·0	0·0	0·0	40	0·00
24	..	29·925	54·5	49·3	51·3	48·4	56·4	48·0	56·7	55·2	2·9	4·0	2·0	+ 3·4	NE	NE	0·0	0·0	0·0	85	0·00
25	Perigee	30·104	57·8	45·3	50·1	45·0	61·5	45·0	56·7	55·2	5·1	8·9	3·2	+ 2·6	NE	E	0·0	0·0	0·0	40	0·00
26	Greatest Declination N.	30·145	54·5	42·7	49·1	45·1	63·5	39·4	55·7	54·2	4·0	9·6	2·2	+ 1·7	ENE	NE	1·5	0·0	0·0	60	0·00
27	..	30·083	57·6	43·0	48·6	42·9	71·2	38·1	55·7	54·6	5·7	9·8	3·1	+ 1·4	NE	NE ; W	0·0	0·0	0·0	90	0·00
28	..	29·884	54·0	43·5	49·3	48·4	54·0	39·0	55·7	54·9	0·9	2·5	0·0	+ 2·3	W	W; NE	4·5	0·0	0·5	140	0·28
29	Last Qr.	30·251	48·2	34·8	41·1	35·7	60·0	30·0	..	..	5·4	9·2	4·7	— 5·7	NNE	NNE	5·3	0·0	0·8	100	0·00
30	..	30·432	52·5	33·0	41·1	37·6	65·7	27·0	53·8	..	3·5	10·1	1·2	— 5·5	NE	NE ; Calm	0·0	0·0	0·0	15	0·00
31	..	30·399	52·0	35·1	41·1	37·4	63·0	34·0	..	..	3·7	10·1	1·5	— 5·4	Calm	NE	0·0	0·0	0·0	25	0·00
Means	..	29·834	59·9	43·9	50·8	46·5	70·5	40·0	57·6	56·3	4·3	9·8	2·3	+ 0·9	...	...	..	..	..	Sum 3280	Sum 1·36

BAROMETER READINGS.

The first maximum in the month was 29$^{\text{in}}$·925 on the 2nd ; the first minimum in the month was 29$^{\text{in}}$·661 on the 5th.

The second maximum ,, was 29$^{\text{in}}$·919 on the 6th ; the absolute minimum ,, was 29$^{\text{in}}$·207 on the 7th.

The third maximum ,, was 29$^{\text{in}}$·808 on the 9th ; the third minimum ,, was 29$^{\text{in}}$·254 on the 10th.

The fourth maximum ,, was 30$^{\text{in}}$·085 on the 14th ; the fourth minimum ,, was 29$^{\text{in}}$·476 on the 19th.

The fifth maximum ,, was 30$^{\text{in}}$·158 on the 26th ; the fifth minimum ,, was 29$^{\text{in}}$·823 on the 28th.

The absolute maximum ,, was 30$^{\text{in}}$·446 on the 30th.

The range in the month was 1$^{\text{in}}$·239.

The mean for the month was 29$^{\text{in}}$·834, being 0$^{\text{in}}$·152 *higher* than the average of the preceding 17 years.

TEMPERATURE OF THE AIR.

The highest in the month was 69°·5 on the 3rd ; the lowest was 33°·0 on the 30th ; and the range in the month was 36°·5.

The mean ,, of all the highest daily readings was 59°·9, being 1°·7 *higher* than the average of the preceding 17 years.

The mean ,, of all the lowest daily readings was 43°·9, being 0°·3 *higher* than the average of the preceding 17 years.

The mean daily range was 16°·0, being 1°·4 *higher* than the average of the preceding 17 years.

The mean for the month was 50°·8, being 1°·3 *higher* than the average of the preceding 17 years.

MONTH and DAY, 1858.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Oct. 1			0	5, ci.-cu, ci.-s, s : 0
2			7, ci	7, ci.-cu, ci : 0
3			3, cu, ci.-cu	10, cu, cu.-s, ci.-s
4			10, cu.-s, ci.-s	10, ci.-cu, ci.-s : oc.-r
5			0 : 10, shs.-r	5, h, shs.-r : t
6			5	5, cu, ci.-cu, ci : 10
7			10	10, cu, ci.-cu, ci, oc.-r
8			2, ci	4, cu, ci.-cu : 0
9			0	5, ci.-cu, ci, oc.-r
10			10, ci.-cu, ci	10, oc.-r
11			5, cu, ci.-cu, ci	5, cu, ci.-cu, ci : 0, l
12			7, cu, cu.-s, ci.-s	5, cu, ci.-cu, ci : 0
13			10, r	10 : 0, h
14			10, r	10, ci.-cu, ci
15			10, ci.-cu, ci.-s	10, cu, ci.-cu, ci : 0
16			0	0
17			10, f	3 : 10, ci.-s
18			10, r	10, r
19			10, r	10, n, ci, sc
20			10	7, ci.-cu, ci, n
21			10, f : 10, ci.-cu, ci	10, ci.-cu, ci
22			10 : 5	8, ci.-cu, ci, sc : 0
23			7, ci, f	7, ci.-cu, cu.-s, ci.-s : 10, ci.-s
24			10	10
25			10	5, ci : 0
26			10, ci.-cu, ci.-s, ci	5, cu, ci.-cu, cu.-s : 0, f
27			10, ci, f : 0	0 : f
28			10, r	10, gt.-glm : 0
29			7, cu, ci.-cu, ci	10, oc.-r
30			3, ci.-s, ci, h.-f	3, ci.-s, ci : f
31			2, ci, h	2, cu.-s, li.-cl : th.-f

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 58°·4 on the 15th; and the lowest was 34°·4 on the 31st.
The mean ,, was 46°·5, being 0°·7 *higher* than the average of the preceding 17 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot317$, being $0^{\text{in}}\cdot007$ *greater* than the average of the preceding 17 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $3^{\text{gr}}\cdot6$, being $0^{\text{gr}}\cdot1$ *greater* than the average of the preceding 17 years.

Degree of Humidity.—The mean for the month was 85 (that of Saturation being represented by 100), being 1 *less* than the average of the preceding 17 years.

Weight of a Cubic Foot of Air.—The mean for the month was 541 grains, being 2 grains *greater* than the average of the preceding 17 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·6.

WIND.

The proportions were of N. 6, S. 6, W. 11, and E. 8. The greatest pressure in the month was $14^{\text{lbs}}\cdot0$ on the square foot on the 7th.

RAIN.

Fell on 9 days in the month, amounting to $1^{\text{in}}\cdot4$, as measured in the simple cylinder gauge partly sunk below the ground; being $1^{\text{in}}\cdot8$ *less* than the average fall of the preceding 17 years.

MONTH and DAY, 1858.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	WIND AS DEDUCED FROM ANEMOMETERS.						Rain in Inches read at 9h P.M.
			Dry.			Dew Point.	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning.						OSLER'S.					WHEWELL'S.	
															General Direction.		Pressure in lbs. on the square foot.			Amount of Horizontal Movement of the Air on each Day.	
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.		
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Nov. 1	..	30·335	46·5	28·2	37·9	36·9	47·7	..	..	..	1·0	4·6	0·9	− 8·5	Calm	Calm	0·0	0·0	0·0	15	0·00
2	In Equator	30·241	52·0	36·0	42·9	39·8	61·0	29·8	..	..	3·1	9·4	1·6	− 3·3	NE	NE ; E	0·0	0·0	0·0	30	0·00
3	..	30·199	54·0	33·2	43·8	38·7	65·0	27·0	..	..	5·1	13·2	0·0	− 2·3	Calm	E	0·0	0·0	0·0	20	0·01
4	..	30·122	52·0	40·5	47·2	45·5	57·0	37·8	..	..	1·7	5·7	0·3	+ 1·3	Calm ; NE	E ; NE	0·0	0·0	0·0	35	0·00
5	New	30·018	51·4	43·8	47·5	41·8	55·0	40·2	..	..	5·7	9·2	2·3	+ 1·8	NNE	NE	3·5	0·0	0·3	110	0·02
6	..	30·172	51·0	37·0	43·0	34·2	60·0	31·2	..	..	8·8	13·9	4·6	− 2·5	NE	NE	5·0	0·0	1·3	110	0·00
7	..	30·255	50·5	35·3	41·5	36·7	60·0	30·0	48·8	47·8	4·8	10·5	1·8	− 3·6	NE	N	2·0	0·0	0·0	60	0·00
8	..	30·170	49·5	38·0	43·7	40·8	55·1	32·0	46·9	46·4	2·9	6·1	1·3	− 1·1	N	N	2·0	0·0	0·0	45	0·00
9	Greatest Declination S.	30·316	47·0	29·3	38·1	32·6	60·0	31·8	46·9	46·0	5·5	13·4	0·0	− 6·4	N ; NE	NE ; Calm	0·0	0·0	0·0	10	0·00
10	Apogee	30·257	43·0	26·8	34·6	31·5	43·0	22·5	45·3	45·0	3·1	6·6	0·6	− 9·7	Calm ; SW	SW ; Calm	0·0	0·0	0·0	0	0·00
11	..	30·144	49·5	30·0	39·8	36·5	58·0	23·0	45·0	45·0	3·3	11·3	0·0	− 4·2	Calm	E	1·8	0·0	0·1	40	0·00
12	..	29·888	45·9	30·0	36·9	34·2	53·0	24·0	44·5	44·5	2·7	9·3	2·0	− 7·0	ESE	E	0·0	0·0	0·0	50	0·00
13	First Qr.	29·407	45·0	31·4	38·7	35·6	47·8	25·0	44·3	44·0	3·1	7·7	1·4	− 4·8	E	ENE	2·0	0·0	0·2	75	0·00
14	..	29·325	45·8	39·5	42·9	36·0	47·0	36·5	43·8	43·8	6·9	9·2	4·4	− 0·4	NE	ENE	13·0	0·0	3·5	230	0·00
15	..	29·509	43·0	33·7	37·5	28·1	47·0	36·2	43·3	43·2	9·4	10·6	9·2	− 5·5	ENE	E	12·0	3·0	5·0	240	0·00
16	In Equator	29·285	39·3	32·0	35·9	30·8	40·0	28·8	42·3	42·3	5·1	6·2	5·0	− 6·7	E	NE	9·0	0·0	2·5	85	0·00
17	..	29·466	42·4	32·4	36·2	30·1	48·9	34·0	42·1	42·1	6·1	8·9	3·3	− 6·2	NE	NE	3·0	0·0	0·3	35	0·00
18	..	29·522	41·6	29·0	35·4	30·4	43·0	24·0	41·8	41·8	5·0	10·6	1·3	− 6·8	NE	NE	3·0	0·0	0·2	40	0·00
19	..	29·733	33·5	26·5	29·1	27·5	33·5	22·3	40·3	40·3	1·6	3·6	0·0	−13·1	Calm	SW	0·0	0·0	0·0	0	0·00
20	..	29·903	37·0	24·6	31·7	30·6	45·0	19·8	39·8	39·8	1·1	3·0	0·7	−10·5	SW	Calm	0·0	0·0	0·0	0	0·00
21	Full	30·000	42·2	27·9	34·1	30 8	48·0	20·8	39·6	39·6	3·3	6·9	0·0	− 7·9	N	Calm	0·0	0·0	0·0	0	0·00
22	Perigee ; Greatest Dec. N.	30·051	43·5	26·0	32·9	28·7	49·3	23·2	39·8	39·8	4·2	12·8	0·0	− 8·8	E	E	2·0	0·0	0·0	10	0·00
23	..	29·919	34·0	21·0	26·5	25·0	37·0	14·0	37·8	37·8	1·5	6·2	1·1	−15·0	E	E	0·0	0·0	0·0	0	0·00
24	..	29·675	30·5	20·5	26·4	24·3	31·0	13·0	37·6	37·6	2·1	5·6	1·4	−14·5	ESE	SE ; E	0·0	0·0	0·0	20	0·00
25	..	29·241	49·5	33·5	42·5	41·6	50·0	26·0	38·6	38·6	0·9	5·3	0·0	+ 1·0	SE	SE	3·0	0·0	0·6	140	0·00
26	..	29·181	58·0	47·7	51·9	48·4	61·5	43·0	39·0	39·0	3·5	5·5	1·1	+11·0	SE ; S	S	2·0	0·0	0·2	115	0·02
27	Last Qr.	28·875	50·0	44·8	47·6	47·2	54·0	40·0	39·8	39·8	0·4	2·9	0·0	+ 6·5	SE	Calm	2·5	0·0	0·3	120	0·21
28	..	29·051	53·8	44·5	47·8	46·4	54·4	39·0	40·8	40·4	1·4	3·2	0·0	+ 6·3	SW ; S	SW	0·0	0·0	0·0	130	0·16
29	In Equator	29·062	53·8	45·0	49·0	47·0	55·6	39·8	41·7	41·7	2·0	3·6	0·8	+ 7·4	SW ; S	SW	3·0	0·0	0·3	135	0·02
30	..	29·168	48·5	40·6	43·8	38·9	48·0	41·0	41·5	41·5	4·9	7·5	2·6	+ 2·2	SW	WSW	7·0	0·0	1·5	205	0·01
Means	..	29·750	46·1	33·6	39·6	35·9	50·5	29·5	42·1	42·0	3·7	7·8	1·6	− 3·7	...	...	..	..	..	Sum 2005	Sum 0·45

BAROMETER READINGS.

The first minimum in the month was 29$^{\text{in}}$·988 on the 5th.

The absolute maximum in the month was 30$^{\text{in}}$·341 on the 9th; the second minimum ,, was 29$^{\text{in}}$·268 on the 14th.

The second maximum ,, was 29$^{\text{in}}$·550 on the 15th ; the third minimum ,, was 29$^{\text{in}}$·273 on the 16th.

The third maximum ,, was 30$^{\text{in}}$·060 on the 22nd; the absolute minimum was 28$^{\text{in}}$·844 on the 27th.

The range in the month was 1$^{\text{in}}$·497.

The mean for the month was 29$^{\text{in}}$·750, being 0$^{\text{in}}$·006 *lower* than the average of the preceding 17 years.

TEMPERATURE OF THE AIR.

The highest in the month was 58°·0 on the 26th; the lowest was 20°·5 on the 24th; and the range in the month was 37°·5.

The mean ,, of all the highest daily readings was 46°·1, being 3°·6 *lower* than the average of the preceding 17 years.

The mean ,, of all the lowest daily readings was 33°·6, being 4°·6 *lower* than the average of the preceding 17 years.

The mean daily range was 12°·5, being 1°·1 *higher* than the average of the preceding 17 years.

The mean for the month was 39°·6, being 4°·2 *lower* than the average of the preceding 17 years.

MONTH and DAY, 1858.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Nov. 1			10, f, h.-f	5, ci, f : 10, r
2			10, ci.-cu, ci.-s : oc.-r	10, ci.-cu, ci, oc.-r : 0
3			0, h.-f	5, ci : 10, r
4			10, r	10, ci.-cu, ci
5			10, ci.-cu, ci	5, ci.-cu, cu.-s : 10, r
6			5, ci.-cu, cu.-s	10, ci.-cu, ci
7			5, ci.-cu, ci	5, cu, ci.-cu, ci : 0
8			10, ci	10, ci.-cu, cu.-s, ci : 0
9			3, ci.-cu, cu.-s	3, cu, ci.-cu, ci
10			7, ci.-cu, ci, f, h.-f	10, ci, f : 0 th.-f
11			10, f	0
12			0	8 : 0
13			7, ci.-s, h.-f	10, cu.-s, ci.-s, h
14	0	0	10	10, ci.-cu, ci.-s, ci
15	0	0	10, cu.-s, ci.-s	10, ci.-cu, ci.-s
16	0	0	10	10 : r
17	0	0	10, ci.-cu, ci	10, ci.-cu, ci.-s
18	0	0	7 ci.-cu, cu.-s : 0	0 : f
19	0	0	10, f, h.-f	10, f
20	0	0	1	1 : h, f
21	w	w	10, ci.-cu, ci, f.	0 : 10, ci.-s, sc
22	w	w	0	5, ci.-cu, ci : 0, h.-f
23	w	w	10, f, h.-f	0, f
24	w	w	10	10
25	w	w	10, ci.-cu, ci.-s	10, ci,-s, m.-r
26	w	w	10, r	10, cu.-s, ci.-s : 0
27	0	0	10, r	10, r
28	0	0	10, f, gt.-glm	5, ci.-cu, cu.-s : 0
29	0	0	10, r	10, ci.-cu, cu.-s, s : m.-r
30	0	0	10, ci.-cu, cu.-s : r	10, ci.-cu, ci.-s

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 50°·5 on the 26th ; and the lowest was 20°·6 on the 23d.

The mean ,, was 35°·9, being 4°·6 *less* than the average of the preceding 17 years.

Elastic Force of Vapour.—The mean for the month was 0in·211, being 0in·049 *less* than the average of the preceding 17 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 2gr·4, being 0gr·5 *less* than the average of the preceding 17 years.

Degree of Humidity.—The mean for the month was 87 (that of Saturation being represented by 100), being 2 *less* than the average of the preceding 17 years.

Weight of a Cubic Foot of Air.—The mean for the month was 552 grains, being 5 grains *greater* than the average of the preceding 17 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·0.

WIND.

The proportions were of N. 7, S. 5, W. 4, and E. 14. The greatest pressure in the month was 13lbs·0 on the square foot on the 14th.

RAIN.

Fell on 7 days in the month, amounting to 0in·5, as measured in the simple cylinder gauge partly sunk below the ground ; being 1in·7 *less* than the average fall of the preceding 17 years.

MONTH and DAY, 1858.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Readings of Thermometers. Dry. Lowest.	Readings of Thermometers. Dry. Mean Daily Value.	Readings of Thermometers. Dew Point. Mean Daily Value.	Highest in the Sun, as shewn by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest.	In the Water of the Thames … Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference … Greatest.	Difference … Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Osler's. General Direction. P.M.	Osler's. Pressure in lbs. on the square foot. Greatest.	Pressure … Least.	Pressure … Mean of 24 Obs.	Whewell's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches read at 9h P.M.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
Dec. 1	..	29·627	46·8	40·5	44·3	38·0	47·0	38·0	41·5	41·5	6·3	9·5	3·5	+ 2·6	NW	SW	6·0	0·0	1·8	155	0·12
2	..	29·614	51·0	39·6	46·2	43·6	51·3	39·8	42·8	42·8	2·6	5·7	1·9	+ 4·4	S by W	W ; SW	3·0	0·0	0·3	85	0·04
3	..	30·007	51·9	33·5	43·7	42·0	54·0	28·0	41·9	41·9	1·7	5·5	1·3	+ 2·0	SW	SW	3·0	0·0	0·2	135	0·00
4	..	29·801	52·0	46·2	49·4	49·0	53·0	42·5	41·5	41·5	0·4	1·5	0·0	+ 7·9	SW	SW	3·0	0·0	0·4	85	0·09
5	New	29·953	49·2	38·5	43·0	38·6	47·8	40·0	43·5	43·5	4·4	6·3	4·0	+ 1·6	W	NNW	2·0	0·0	0·2	60	0·00
6	Greatest Declination S	30·159	37·0	30·5	33·5	33·3	37·0	25·0	43·0	43·0	0·2	0·3	0·0	− 7·6	N ; W	W	0·0	0·0	0·0	0	0·00
7	..	30·080	39·0	30·3	34·6	33·4	39·0	25·0	42·8	42·8	1·2	3·5	0·7	− 6·1	Calm	NE	0·0	0·0	0·0	0	0·00
8	Apogee	30·111	39·5	34·7	36·7	35·1	39·5	32·0	42·4	42·4	1·6	5·8	1·0	− 3·9	ESE	Calm	0·0	0·0	0·0	0	0·00
9	..	30·168	40·0	35·5	38·2	35·5	40·0	32·0	42·8	42·8	2·7	5·5	2·2	− 2·3	Calm	Calm	0·0	0·0	0·0	10	0·00
10	..	30·171	39·8	33·1	35·3	31·4	39·8	31·0	42·3	42·3	3·9	4·4	3·3	− 5·1	SE	Calm	0·0	0·0	0·0	0	0·00
11	..	30·160	37·5	31·5	34·5	31·6	37·6	29·0	41·8	41·8	2·9	3·3	2·8	− 5·7	S	S	0·0	0·0	0·0	35	0·00
12	..	29·928	37·7	35·3	36·2	30·4	38·0	34·0	41·5	41·5	5·8	6·0	4·5	− 3·8	S	S	1·5	0·0	0·0	55	0·00
13	First Quarter In Equator	29·774	46·0	34·8	41·9	40·5	46·4	33·0	41·5	41·5	1·4	2·9	0·7	+ 2·3	Variable	SW ; W	0·0	0·0	0·0	0	0·07
14	..	30·049	40·0	37·0	38·2	36·4	42·0	33·4	41·5	41·5	1·8	3·6	0·0	− 1·5	Calm	Calm	0·0	0·0	0·0	0	0·00
15	..	30·069	43·0	33·5	38·1	36·1	45·0	30·7	41·2	41·2	2·0	4·8	0·0	− 1·9	NE ; N	E ; SE	2·5	0·0	0·1	50	0·00
16	..	30·018	40·0	34·5	36·9	33·8	42·0	32·0	41·0	41·0	3·1	3·8	2·6	− 3·4	SE ; S	SE	2·5	0·0	0·1	30	0·00
17	..	29·804	41·2	34·5	37·4	34·3	41·2	32·2	40·5	40·5	3·1	4·1	2·6	− 2·7	SE	SE ; S	0·0	0·0	0·0	90	0·00
18	..	29·424	51·0	34·9	43·3	41·8	52·5	32·0	40·5	40·5	1·5	4·2	1·4	+ 3·4	S	S ; SW	10·0	0·0	2·5	210	0·26
19	..	29·379	48·5	42·0	45·2	41·6	51·8	24·0	42·0	42·0	3·6	5·7	2·6	+ 5·7	SW	SW	4·0	0·0	1·5	150	0·25
20	Greatest Dec N Full	29·528	46·5	34·9	40·6	37·0	46·5	32·0	42·0	42·0	3·6	5·5	1·9	+ 1·6	SW	SSW	0·0	0·0	0·0	110	0·00
21	Perigee	29·566	53·5	39·5	48·0	47·7	53·5	35·0	41·5	41·5	0·3	3·2	0·0	+ 9·6	S	SW	7·0	0·0	3·0	230	0·06
22	..	29·573	49·3	42·5	45·2	38·1	53·0	39·0	41·9	41·9	7·1	8·2	6·6	+ 7·3	SW	WSW	12·0	0·5	4·0	215	0·05
23	..	29·234	52·2	40·5	47·3	44·0	53·0	39·0	42·6	42·6	3·3	6·5	1·1	+ 9·9	SW ; S	SW	16·0	0·5	4·5	255	0·14
24	..	29·402	48·0	39·5	43·1	36·6	53·0	34·5	42·4	42·4	6·5	8·0	4·1	+ 6·1	WSW	SW	11·0	0·0	2·5	155	0·00
25	..	29·387	47·5	35·1	42·3	41·7	48·8	28·8	42·9	42·9	0·6	3·7	0·0	+ 5·6	Calm	S ; SW	4·0	0·0	0·5	175	0·35
26	In Equator	29·156	49·8	39·5	43·7	39·1	55·0	33·0	42·4	42·4	4·6	7·6	0·9	+ 7·3	SW	WSW	14·0	0·0	3·2	245	0·18
27	Last Qr.	29·288	44·0	38·4	41·5	36·1	45·2	34·0	42·4	42·4	5·4	6·2	3·0	+ 5·0	WSW	W	8·0	0·0	1·0	130	0·00
28	..	29·589	45·0	36·5	41·1	36·7	45·7	34·0	42·1	42·1	4·4	6·9	1·4	+ 4·1	NW	SW	4·0	0·0	0·5	55	0·02
29	..	29·820	45·0	35·2	39·2	34·4	46·8	29·0	41·5	41·5	4·8	6·8	2·5	+ 1·9	NW	NW	3·0	0·0	0·4	85	0·00
30	..	29·963	43·8	31·9	39·2	39·2	43·4	24·0	41·5	41·5	0·0	2·5	0·0	+ 1·8	Calm	SW	0·0	0·0	0·0	10	0·02
31	..	30·101	44·0	39·5	41·8	41·1	44·3	35·3	41·2	41·2	0·7	1·8	0·0	+ 4·2	Calm	S	0·0	0·0	0·0	35	0·02
Means	..	29·771	45·1	36·6	41·0	38·0	46·3	32·6	41·9	41·9	3·0	4·9	1·8	+ 1·6	...	...	..	..	..	Sum 2850	Sum 1·67

BAROMETER READINGS.

The first maximum in the month was 30$^{\text{in}}$·030 on the 3rd; the first minimum in the month was 29$^{\text{in}}$·783 on the 4th.
The absolute maximum ,, was 30$^{\text{in}}$·200 on the 6th; the second minimum ,, was 29$^{\text{in}}$·744 on the 13th.
The third maximum ,, was 30$^{\text{in}}$·138 on the 15th; the third minimum ,, was 29$^{\text{in}}$·382 on the 19th.
The fourth maximum ,, was 29$^{\text{in}}$·639 on the 21st; the absolute minimum ,, was 29$^{\text{in}}$·091 on the 23rd.
The fifth maximum ,, was 29$^{\text{in}}$·515 on the 25th; the fifth minimum ,, was 29$^{\text{in}}$·145 on the 26th.
The range in the month was 1$^{\text{in}}$·109.
The mean for the month was 29$^{\text{in}}$·771, being 0$^{\text{in}}$·065 *lower* than the average of the preceding 17 years.

TEMPERATURE OF THE AIR.

The highest in the month was 53°·5 on the 21st; the lowest was 30°·3 on the 7th; and the range in the month was 23°·2.
The mean ,, of all the highest daily readings was 45°·1, being 0°·3 *lower* than the average of the preceding 17 years.
The mean ,, of all the lowest daily readings was 36°·6, being 0°·8 *higher* than the average of the preceding 17 years.
The mean daily range was 8°·5, being 1°·1 *lower* than the average of the preceding 17 years.
The mean for the month was 41°·0, being 0°·5 *higher* than the average of the preceding 17 years.

MONTH and DAY, 1858.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Dec. 1	0	0	2, ci, h	2, ci : 10, h.-r
2	0	0	10, r	10, ci.-cu, cu.-s, ci.-s : 0
3	0	0	2, ci	2, ci.-cu, ci.-s
4	0	0	10, r	10, r
5	0	0	0, h	9, cu, ci.-cu : 0
6	0	0	10, f	10, th.-f
7	0	0	10, th.-f	10, ci.-cu, ci.-s
8	0	0	10	10, r
9	0	0	10	10
10	0	0	10	10
11	0	0	10	10
12	0	0	10	10
13	0	0	10	10
14	0	0	10, f	10, f
15	0	0	10, th.-f, oc.-r	10, cu, ci.-cu : 7, ci : 10
16	0	0	10	10, cu.-s, ci.-s : oc.-r
17	0	0	10	10, ci.-cu, cu.-s
18	0	0	10, ci.-cu, ci.-s	10, h.-r : 0
19	0	0	2	2 : 7, ci.-cu, ci
20	0	0	0, h.-f	0 : 10
21	0	0	10, r	10, r
22	ss : 0	0	8, ci.-cu, ci.-s	0 : 10, s
23	0	0	10, r	10, r
24	0	0 : w	0	0
25	0	0	10, oc.-r	10, oc.-r
26	0	0	10, ci.-cu, ci.-s	0 : 2
27	0	w : 0	3, ci	5, ci.-s : 0
28	0	0 : w	10	10, ci.-cu, ci
29	w : 0	0	5, ci.-cu, ci	5, ci.-cu, ci : 0
30	0	m	10	10, r
31	0	0	10, m.-r, f	10

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 51°·5 on the 4th; and the lowest was 30°·3 on the 7th.

The mean ,, was 38°·0, being 0°·8 *higher* than the average of the preceding 17 years.

Elastic Force of Vapour.—The mean for the month was 0in·229, being the same as the average of the preceding 17 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 2gr·6, being the same as the average of the preceding 17 years.

Degree of Humidity.—The mean for the month was 89 (that of Saturation being represented by 100), being 1 *greater* than the average of the preceding 17 years.

Weight of a Cubic Foot of Air.—The mean for the month was 551 grains, being 1 grain *less* than the average of the preceding 17 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·7.

WIND.

The proportions were of N. 3, S. 14, W. 10, and E. 4. The greatest pressure in the month was 16lbs·0 on the square foot on the 23rd.

RAIN.

Fell on 14 days in the month, amounting to 1in·7, as measured in the simple cylinder gauge partly sunk below the ground; being 0in·3 *greater* than the average fall of the preceding 17 years.

MEMORANDUM

REGARDING THE APPEARANCE OF A CLOUD, 1858, MARCH 16.

THE Annular Eclipse of the Sun took place on March 15. I was stationed, for the purpose of observing it, at Harrowden, near Wellingborough. The sky for some time before, and during, and after the Eclipse, was the most hopeless that I ever saw. After a bright morning there came a uniform dull leaden cirro-stratus over every part of the heavens. The Sun's form was scarcely seen at all; once only, when a crescent seemed partly visible to the naked eye, I directed the telescope to it, but could see nothing whatever, except an appearance as of fog-drops crossing the field. The air must have been in a singular state as regards moisture, and this, probably, may lead to the explanation of the following phænomena:—

On March 16, about ½ an hour after noon, at Keysoe, near Kimbolton, the Sun being partially hidden by a cloud of a long shape,—possibly 12° long and 6° broad,—I perceived that this cloud was edged all round by stripes of pink and green, like those in Newton's rings of a high order; they were most brilliant, but, I think, narrowest, in that part to which the Sun was nearest. In that part there were certainly four pinks and four greens, and so I believe there were in the whole circumference, but I am not quite so certain of it. Within the cloud, the Sun himself was surrounded by irregular rings, four pinks and four greens.

The cloud seemed so stationary while there was a sensible N.W. wind blowing below, that I thought for a long time that it must be local, like a mountain cloud. It moved away at last, but very slowly, as carried by the wind. If its motion was simply a wind-motion, it was very high. I watched it nearly an hour.

G. B. AIRY.

Maxima and Minima Readings of the Barometer.

The following table contains the highest and lowest readings of the Barometer, reduced to 32° Fahrenheit, abstracted from the observations taken by the eye. There is good reason to believe that these readings do not differ much from the true maxima and minima, although the times may sometimes be sensibly erroneous.

MAXIMA.		
Approximate Mean Solar Time, 1858.		Reading.
	d h m	in.
January	11. 21. 0	30·455
	16. 22. 30	30·557
	23. 22. 20	30·489
	28. 21. 0	30·160
February	9. 21. 0	30·017
	12. 9. 0	30·089
	17. 9. 0	30·042
	24. 21. 0	30·206
March	3. 9. 0	29·656
	11. 21. 0	30·071
	13. 22. 30	29·508
	21. 21. 0	30·448
	25. 9. 0	30·158
April	1. 21. 45	29·798
	4. 9. 30	30·003
	14. 0. 0	30·035
	17. 22. 0	30·087
	21. 21. 0	30·270
May	6. 21. 0	30·257
	19. 21. 0	29·972
	26. 0. 0	30·393
June	4. 9. 0	30·011
	6. 9. 15	30·036
	14. 21. 0	29·860
	22. 21. 0	30·207
	27. 21. 0	30·017
July	3. 9. 0	30·073

MINIMA.		
Approximate Mean Solar Time, 1858.		Reading.
	d h m	in.
January	9. 3. 0	29·920
	13. 3. 0	30·144
	20. 0. 0	29·733
	26. 9. 0	29·930
February	3. 21. 0	29·393
	10. 21. 0	29·863
	14. 1. 0	29·782
	22. 21. 0	29·566
March	1. 3. 0	29·388
	5. 21. 0	28·882
	13. 3. 0	29·143
	14. 7. 40	29·378
	24. 9. 0	29·951
	31. 9. 0	28·938
April	3. 3. 0	29·427
	7. 21. 0	29·367
	16. 9. 0	29·738
	19. 3. 0	29·911
May	0. 21. 0	28·951
	15. 3. 0	29·262
	24. 9. 0	29·322
June	3. 9. 0	29·648
	4. 21. 0	29·859
	8. 3. 0	29·713
	16. 21. 0	29·596
	26. 9. 0	29·849
July	2. 3. 0	29·869

MAXIMA.		
Approximate Mean Solar Time, 1858.		Reading.
	d h m	in.
July	11. 21. 0	29·968
	18. 21. 0	30·002
	21. 21. 0	29·820
	26. 9. 0	29·814
August	0. 22. 0	30·136
	6. 21. 0	30·264
	15. 21. 0	29·919
	20. 9. 0	29·769
	23. 21. 0	30·026
September	14. 9. 0	30·060
	20. 9. 0	30·093
	24. 21. 0	30·416
October	1. 21. 0	29·925
	6. 0. 0	29·919
	8. 21. 0	29·808
	13. 21. 0	30·085
	26. 0. 0	30·158
	30. 9. 0	30·446
November	9. 9. 0	30·341
	14. 21. 0	29·550
	22. 0. 0	30·060
December	3. 0. 0	30·030
	6. 9. 0	30·200
	14. 21. 0	30·138
	20. 21. 0	29·639
	24. 22. 30	29·515

MINIMA.		
Approximate Mean Solar Time, 1858.		Reading.
	d h m	in.
July	6. 9. 0	29·473
	15. 3. 0	29·659
	20. 21. 0	29·597
	24. 21. 15	29·311
	27. 9. 0	29·569
August	3. 0. 0	29·670
	14. 3. 0	29·718
	18. 9. 0	29·505
	21. 9. 0	29·525
	29. 21. 0	29·530
September	17. 9. 0	29·510
	23. 0. 0	29·497
	29. 21. 0	29·466
October	5. 3. 0	29·661
	7. 3. 0	29·207
	10. 7. 0	29·254
	19. 0. 0	29·476
	28. 3. 0	29·823
November	5. 3. 0	29·988
	13. 22. 0	29·268
	16. 3. 0	29·273
	27. 3. 0	28·844
December	4. 9. 0	29·783
	12. 21. 0	29·744
	18. 22. 30	29·382
	23. 9. 0	29·091
	26. 1. 0	29·143

MONTHLY MEANS of RESULTS for METEOROLOGICAL ELEMENTS at the ROYAL OBSERVATORY, GREENWICH, in the Year 1858.

1858, MONTH.	Mean Reading of the Barometer.	TEMPERATURE OF THE AIR.							Mean Temperature of Dew Point.
		Highest.	Lowest.	Range in the Month.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily Range.	Mean Temperature.	
	in.	°	°	°	°	°	°	°	°
January	30·171	51·9	20·9	31·0	43·6	31·7	11·9	37·5	33·5
February...........	29·841	52·8	23·5	29·3	41·8	29·8	12·0	34·6	30·3
March	29·761	68·7	23·6	45·1	50·7	33·6	17·1	41·4	34·5
April..............	29·779	76·0	27·2	48·8	57·6	38·0	19·6	46·2	39·1
May................	29·742	81·2	32·1	49·1	63·7	42·7	21·0	51·7	43·5
June	29·915	94·5	45·3	49·2	79·5	53·9	25·6	64·9	54·4
July...............	29·781	88·2	43·8	44·4	73·9	51·9	22·0	60·7	51·3
August	29·826	86·9	43·3	43·6	75·6	52·1	23·5	62·0	51·6
September..........	29·865	83·8	41·5	42·3	70·9	52·6	18·3	60·3	53·6
October............	29·834	69·5	33·0	36·5	59·9	43·9	16·0	50·8	46·5
November	29·750	58·0	20·5	37·5	46·1	33·6	12·5	39·6	35·9
December	29·771	53·5	30·3	23·2	45·1	36·6	8·5	41·0	38·0
Means	29·836	72·1	32·1	40·0	59·0	41·7	17·3	49·2	42·7

1858, MONTH.	Mean Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean additional Weight required to saturate a Cubic Foot of Air.	Mean Degree of Humidity. (Sat. = 100.)	Mean Weight of a Cubic Foot of Air.	WIND.			Mean Amount of Cloud. 0–10	RAIN.	
						Prevailing Direction.	Mean Daily Pressure in lbs. on the Square Foot.	Mean Daily Horizontal Movement of Wind in Miles.		Number of Rainy Days.	Amount collected on the Ground.
	in.	gr.	gr.		gr.						in.
January......	0·192	2·2	0·4	86	563	SW	0·18	120	5·6	5	0·8
February.....	0·169	2·0	0·3	84	560	NE	0·05	83	5·1	6	1·7
March	0·199	2·3	0·7	78	551	NW; W	0·10	87	5·4	8	0·8
April........	0·238	2·8	0·9	77	545	E	0·05	73	6·2	11	2·3
May..........	0·283	3·2	1·2	75	539	SW	..	96	7·0	17	2·0
June.........	0·424	4·6	2·1	69	527	SW	0·10	34	5·2	5	1·2
July.........	0·378	4·2	1·7	71	529	SW	0·43	77	6·9	12	3·0
August	0·382	4·2	2·0	69	529	SW	0·29	..	5·1	8	1·5
September....	0·412	4·6	1·3	78	531	SW; NE	0·49	101	7·1	10	0·9
October......	0·317	3·6	0·6	85	541	SW; NE	0·66	106	6·6	9	1·4
November	0·211	2·4	0·4	87	552	NE	0·54	67	7·0	7	0·5
December	0·229	2·6	0·4	[illegible]	551	SW	0·86	92	7·7	14	1·7
Means	0·286	3·2	1·0	79	543	..	..	..	6·2	Sum 112	Sum 17·8

READINGS OF THERMOMETERS SUNK IN THE GROUND.

(I.)—Reading of a Thermometer whose bulb is sunk to the depth of 25·6 feet (24 French feet) below the surface of the soil, at Noon on every Day generally, except Sundays, Good Friday, and Christmas Day.

Day of the Month, 1858.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	52·21	51·65	50·95	49·98	49·13	48·82	48·94	*S*	50·74	51·62	52·13	52·32
2	52·20	51·62	50·92	Good Friday.	*S*	48·83	48·96	49·77	50·70	51·56	52·25	52·35
3	*S*	51·66	50·84	49·93	49·11	48·83	48·97	49·83	50·75	*S*	52·18	52·32
4	52·14	51·62	50·82	*S*	49·07	48·82	*S*	49·84	50·80	51·78	52·20	52·40
5	52·13	51·60	50·83	49·85	49·07	48·81	49·03	49·86	*S*	51·80	52·20	*S*
6	52·07	51·62	50·74	49·77	49·07	*S*	49·03	49·90	50·83	51·81	52·23	52·29
7	52·10	*S*	*S*	49·97	49·03	48·80	49·04	49·94	50·85	51·90	*S*	52·29
8	52·12	51·53	50·74	49·74	49·02	48·81	49·09	*S*	50·90	51·90	52·25	52·32
9	52·10	51·48	50·70	49·70	*S*	48·83	49·10	49·98	50·93	51·80	52·22	52·30
10	*S*	51·43	50·67	49·66	48·97	48·82	49·11	50·06	50·95	*S*	52·22	52·26
11	52·08	51·42	50·62	*S*	48·96	48·84	*S*	50·06	51·03	51·76	52·25	52·25
12	52·05	51·44	50·63	49·69	48·94	48·82	49·18	50·13	*S*	51·80	52·24	*S*
13	53·06	51·40	50·60	49·60	48·94	*S*	49·20	50·14	51·08	51·84	52·24	52·30
14	52·00	*S*	*S*	49·58	48·93	48·83	49·27	50·13	51·10	51·86	*S*	52·28
15	51·98	51·35	50·55	49·58	48·89	48·84	49·29	*S*	51·12	51·80	52·25	52·26
16	52·00	51·32	50·56	49·56	*S*	48·83	49·27	50·20	51·18	51·91	52·25	52·25
17	*S*	51·32	50·47	49·49	48·88	48·83	49·30	50·29	51·20	*S*	52·30	52·24
18	51·95	51·26	50·47	*S*	48·86	48·82	*S*	50·32	51·20	51·80	52·28	52·26
19	51·94	51·24	50·40	49·44	48·78	48·83	49·37	50·32	*S*	51·90	52·26	*S*
20	51·92	51·21	50·40	49·44	48·87	*S*	49·40	50·32	51·24	51·98	52·28	52·22
21	51·90	*S*	*S*	49·43	48·99	48·86	49·37	50·50	51·28	52·00	*S*	52·22
22	51·85	51·17	50·35	49·40	48·83	48·87	49·42	*S*	51·30	52·04	52·32	52·20
23	51·82	51·14	50·34	49·37	*S*	48·87	49·50	50·43	51·32	52·07	52·30	52·18
24	*S*	51·13	50·28	49·33	48·84	48·87	49·50	50·44	51·36	*S*	52·36	52·17
25	51·80	51·09	50·20	*S*	48·82	48·90	*S*	50·46	51·40	52·14	52·32	Christ. Day.
26	51·76	51·04	50·20	49·26	48·23	48·92	49·56	50·51	*S*	52·10	52·35	*S*
27	51·79	51·00	50·17	49·20	48·80	*S*	49·60	50·50	51·42	52·10	52·35	52·12
28	51·75	*S*	*S*	49·23	48·81	48·93	49·60	50·55	51·48	52·11	*S*	52·10
29	51·75		50·10	49·20	48·80	48·93	49·64	*S*	51·53	52·10	52·35	52·07
30	51·74		50·08	49·17	*S*	49·00	49·68	50·61	51·55	52·14	52·33	52·03
31	*S*		50·02		48·84		49·72	50·63		*S*		52·00
Means	51·97	51·36	50·50	49·54	48·92	48·85	49·30	50·22	51·12	51·91	52·27	52·23

(II.)—Reading of a Thermometer whose bulb is sunk to the depth of 12·8 feet (12 French feet) below the surface of the soil, at the same times.

Day of the Month, 1858.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	51·73	49·26	47·14	45·62	46·50	48·40	51·90	*S*	56·05	56·35	55·32	52·60
2	51·66	49·12	47·08	Good Friday.	*S*	48·50	52·00	54·48	56·00	56·30	55·35	52·50
3	*S*	49·14	47·02	45·65	46·63	48·52	52·12	54·56	56·08	*S*	55·32	52·35
4	51·50	49·05	46·90	*S*	46·68	48·63	*S*	54·61	56·12	56·35	55·26	52·38
5	51·44	48·90	46·85	45·70	46·83	48·67	52·40	54·67	*S*	56·30	55·20	*S*
6	51·30	48·95	46·73	45·70	46·88	*S*	52·52	54·67	56·10	56·30	55·14	52·06
7	51·30	*S*	*S*	45·81	46·93	48·80	52·60	54·73	56·11	56·30	*S*	51·90
8	51·30	48·65	46·62	45·76	47·00	48·90	52·72	*S*	56·15	56·25	55·00	51·83
9	51·22	48·52	46·51	45·86	*S*	49·06	52·85	54·87	56·20	56·28	54·88	51·75
10	*S*	48·45	46·45	45·80	47·13	49·14	52·92	54·93	56·16	*S*	54·72	51·65
11	51·12	48·38	46·40	*S*	47·12	49·30	*S*	54·97	56·25	56·20	54·72	51·60
12	50·94	48·33	46·35	45·89	47·23	49·36	53·08	55·07	*S*	56·20	54·62	*S*

(II.)—Reading of a Thermometer whose bulb is sunk to the depth of 12 French feet—*concluded.*

Day of the Month, 1858.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
13	50·89	48·29	46·30	45·90	47·23	*S*	53·21	55·07	56·28	56·23	54·50	51·58
14	50·80	*S*	*S*	46·00	47·35	49·67	53·28	55·08	56·25	56·20	*S*	51·46
15	50·72	48·15	46·11	46·00	47·32	49·80	53·43	*S*	56·24	56·20	54·33	51·40
16	50·62	48·05	46·13	46·07	*S*	49·96	53·38	55·19	56·26	56·16	54·21	51·32
17	*S*	47·98	46·02	46·01	47·47	50·01	53·46	55·36	56·22	*S*	54·13	51·25
18	50·48	47·87	45·98	*S*	47·50	50·10	*S*	55·36	56·20	56·00	54·04	51·20
19	50·40	47·83	45·88	46·06	47·61	50·26	53·56	55·40	*S*	55·95	53·90	*S*
20	50·35	47·71	45·80	46·08	47·60	*S*	53·62	55·38	56·20	55·97	53·80	51·05
21	50·20	*S*	*S*	46·12	47·77	50·54	53·62	55·41	56·20	55·92	*S*	51·00
22	50·13	47·62	45·70	46·10	47·70	50·77	53·71	*S*	56·25	55·87	53·66	50·90
23	50·00	47·56	45·73	46·15	*S*	50·87	53·80	55·63	56·27	55·84	53·48	50·80
24	*S*	47·53	45·67	46·11	47·86	51·00	53·84	55·67	56·24	*S*	53·35	50·75
25	49·82	47·40	45·60	*S*	47·85	51·12	*S*	55·67	56·31	55·71	53·30	Christ. Day.
26	49·72	47·37	45·60	46·23	47·96	51·30	53·97	55·73	*S*	55·70	53·27	*S*
27	49·71	47·24	45·60	46·21	48·00	*S*	54·06	55·73	56·32	55·65	53·12	50·52
28	49·63	*S*	*S*	46·32	48·13	51·54	54·08	55·80	56·32	55·57	*S*	50·45
29	49·56		45·56	46·38	48·12	51·65	54·16	*S*	56·36	55·46	52·90	50·35
30	49·48		45·63	46·42	*S*	51·90	54·27	55·90	56·36	55·49	52·72	50·20
31	*S*		45·59		48·36		54·32	55·93		*S*		50·12
Means.	50·62	48·22	46·18	46·00	47·41	49·91	53·29	55·22	56·21	56·03	54·24	51·35

(III.)—Reading of a Thermometer whose bulb is sunk to the depth of 6·4 feet (6 French feet) below the surface of the soil, at the same times.

Day of the Month, 1858.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	49·73	45·14		44·92	48·57	51·68	59·09	*S*	60·65	59·43	55·60	49·00
2	49·54	45·13		Good Friday.	*S*	51·94	59·17	59·94	60·53	59·30	55·43	49·02
3	*S*	45·15		45·22	48·83	52·24	59·22	59·95	60·45	*S*	55·20	49·03
4	49·20	45·12		*S*	48·80	52·62	*S*	59·95	60·40	59·23	54·90	49·30
5	49·07	45·04		45·36	48·86	52·95	59·28	60·03	*S*	59·12	54·64	*S*
6	48·86	45·20		45·42	48·83	*S*	59·25	60·05	60·20	59·01	54·39	49·10
7	48·66	*S*		45·52	48·84	53·70	59·11	60·15	60·20	58·95	*S*	49·10
8	48·50	44·95		45·52	48·88	54·02	59·12	*S*	60·12	58·76	54·00	49·15
9	48·22	44·92		45·64	*S*	54·36	59·05	60·22	60·10	58·65	53·70	48·96
10	*S*	44·90		45·52	49·03	54·56	58·96	60·43	59·97	*S*	53·48	48·80
11	47·73	44·80		*S*	49·09	54·80	*S*	60·45	59·99	58·24	53·30	48·72
12	47·60	44·78		45·49	49·15	55·10	58·78	60·62	*S*	58·10	53·10	*S*
13	47·59	44·55		45·50	49·30	*S*	58·67	60·65	59·94	57·95	52·83	48·70
14	47·62	*S*		45·43	49·44	55·76	58·64	60·70	59·88	57·70	*S*	48·50
15	47·56	44·17		45·50	49·50	56·10	58·80	*S*	59·90	57·50	52·30	48·38
16	47·42	44·11		45·52	*S*	56·42	58·72	60·95	59·94	57·38	52·04	48·34
17	*S*	44·14		45·51	49·68	56·61	58·85	61·20	59·95	*S*	51·80	48·20
18	47·24	44·11		*S*	49·72	56·93	*S*	61·20	60·00	57·10	51·52	48·16
19	47·10	44·14		45·92	49·85	57·32	59·22	61·18	*S*	57·10	51·30	*S*
20	46·97	44·04		46·18	49·94	*S*	59·38	61·13	60·10	57·02	51·10	47·90
21	46·80	*S*		46·46	50·16	57·82	59·40	61·13	60·08	56·92	*S*	47·90
22	46·78	44·01		46·56	50·20	58·02	59·53	*S*	60·10	56·83	50·60	47·85
23	46·54	43·79		46·82	*S*	58·12	59·72	61·31	60·00	56·74	50·31	47·82
24	*S*	43·64		47·10	50·57	58·19	59·77	61·25	59·90	*S*	50·03	47·80
25	46·36	43·50	43·60	*S*	50·71	58·33	*S*	61·08	59·60	56·55	49·85	Christ. Day
26	46·20		44·02	47·61	50·92	58·55	59·90	61·01	*S*	56·48	49·60	*S*

(III.)—Reading of a Thermometer whose bulb is sunk to the depth of 6 French feet—*concluded.*

Day of the Month, 1858.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
27	46·03	43·30	44·14	47·84	50·98	*S*	60·00	60·92	59·74	56·40	49·30	47·80
28	45·80	*S*	*S*	48·12	51·15	58·77	59·95	60·92	59·64	56·28	*S*	47·80
29	45·60		44·48	48·31	51·20	58·90	60·02	*S*	59·60	56·05	49·00	47·70
30	45·50		44·62	48·44	*S*	59·12	60·05	60·82	59·50	56·02	48·96	47·46
31	*S*		44·60		51·48		60·02	60·72		*S*		47·35
Means.	47·47	44·46	44·24	46·22	49·76	55·88	59·32	60·69	60·03	57·65	52·24	48·38

At temperatures below 43°·50 the fluid of this thermometer descends below the scale; the readings from March 1 to March 24 were all less than 43°·50.

(IV.)—Reading of a Thermometer whose bulb is sunk to the depth of 3·2 feet (3 French feet) below the surface of the soil, at the same times.

Day of the Month, 1858.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	45·13	40·92		44·80	49·86	55·40	63·96	*S*	61·80	60·18	52·26	45·70
2	44·96	40·71		Good Friday.	*S*	56·53	63·74	62·66	61·57	59·77	51·62	45·73
3	*S*	40·34		44·28	49·26	57·50	63·30	62·91	61·50	*S*	51·22	45·85
4	44·62	40·07		*S*	49·10	58·35	*S*	63·21	61·71	59·35	50·80	45·90
5	44·24	40·50		44·65	49·15	58·87	62·52	63·44	*S*	59·25	50·70	*S*
6	43·30	41·30		44·48	49·03	*S*	62·37	63·64	61·70	58·90	50·70	46·00
7	42·67	*S*		44·40	49·23	59·12	62·00	63·70	61·28	58·30	*S*	45·55
8	42·14	40·90		44·18	49·24	59·24	61·74	*S*	61·00	57·82	50·10	45·20
9	42·12	40·39		44·28	*S*	59·65	61·20	63·74	61·03	57·50	49·78	44·80
10	*S*	39·88		44·03	49·64	60·20	60·80	63·94	60·90	*S*	49·40	44·55
11	43·16	39·88		*S*	50·08	60·80	*S*	64·16	61·15	56·40	48·87	44·38
12	43·42	39·60		43·70	50·45	61·19	60·62	64·63	*S*	56·10	48·32	*S*
13	43·32	39·40		43·72	50·48	*S*	61·06	64·94	61·53	55·64	47·80	43·98
14	43·07	*S*		43·80	50·33	62·12	61·60	65·22	61·70	55·64	*S*	43·85
15	42·72	39·91		43·90	50·30	62·70	62·22	*S*	61·93	55·98	47·09	44·00
16	42·32	39·84		44·55	*S*	63·49	62·80	64·94	62·18	56·30	46·88	44·00
17	*S*	40·00		45·07	50·81	64·01	63·42	64·95	62·30	*S*	46·54	43·90
18	42·28	39·70	40·25	*S*	50·95	64·38	*S*	64·75	62·32	56·26	46·33	43·80
19	41·90	39·74	41·18	46·75	51·36	64·10	63·60	64·82	*S*	55·92	45·90	*S*
20	41·98	39·30	41·70	47·17	51·45	*S*	63·60	64·79	61·60	55·72	45·38	44·25
21	42·03	*S*	*S*	47·63	51·85	63·40	63·52	64·60	61·30	55·73	*S*	44·20
22	41·91	39·10	42·76	48·02	52·30	63·45	63·80	*S*	61·20	55·62	44·44	44·25
23	41·47	39·10	43·01	48·64	*S*	63·70	63·73	63·69	61·10	55·56	44·00	44·60
24	*S*	38·90	43·13	49·15	52·97	63·88	63·70	63·50	61·05	*S*	43·50	44·80
25	40·70	38·80	43·48	*S*	52·92	64·08	*S*	63·50	60·95	55·25	43·[illegible]	Christ. Day.
26	40·24		43·80	49·92	52·92	64·10	63·54	63·55	*S*	55·10	42·90	*S*
27	39·92	38·50	43·78	49·86	52·74	*S*	63·42	63·12	60·22	54·92	43·60	44·40
28	39·58	*S*	*S*	49·96	52·92	64·30	63·21	62·90	60·12	54·59	*S*	44·[illegible]
29	39·40		43·88	49·94	53·12	64·10	63·06	*S*	60·12	54·13	45·00	44·05
30	39·50		44·11	50·00	*S*	64·20	62·71	62·26	60·10	53·70	45·40	43·60
31	*S*		44·34		54·45		62·43	61·90		*S*		43·28
Means.	42·23	39·84	42·95	46·29	51·03	61·65	62·73	63·82	61·28	56·52	47·37	44·57

At temperatures below 39°·70 the fluid of this thermometer descends below the scale; the readings on those days, which are slightly below this value, are estimated readings only, and therefore liable to some uncertainty. From March 1 to March 17 the readings were all below 39°.

(V.)—Reading of a Thermometer whose bulb is sunk to the depth of 1 inch below the surface of the soil, within the case which covers the tops of the deep-sunk Thermometers, at the same times.

Day of the Month, 1858.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	41·1	37·6	34·5	46·0	49·0	68·0	65·0	*S*	63·0	56·8	42·0	45·0
2	42·9	35·2	34·4	Good Friday.	*S*	68·7	62·8	64·6	61·2	59·0	45·8	48·0
3	*S*	37·9	34·7	48·5	49·3	70·4	62·2	68·4	66·0	*S*	44·8	43·5
4	38·6	45·0	35·0	*S*	48·6	68·0	*S*	66·9	65·0	59·5	48·0	48·0
5	34·7	42·6	35·9	44·6	49·9	64·1	62·7	68·4	*S*	56·5	48·5	*S*
6	33·0	43·0	36·2	43·2	52·3	*S*	62·7	65·7	59·0	53·0	46·7	39·7
7	34·7	*S*	*S*	43·8	50·8	63·4	61·0	66·4	61·0	56·0	*S*	37·8
8	42·2	37·2	36·2	47·2	51·2	66·0	61·3	*S*	63·0	52·5	45·8	40·5
9	45·8	36·0	35·5	42·8	*S*	69·4	60·8	66·6	61·0	56·3	45·7	41·0
10	*S*	36·6	36·4	44·0	54·6	66·4	58·0	67·9	63·5	*S*	40·6	40·0
11	47·2	35·0	35·0	*S*	54·0	68·3	*S*	69·1	64·5	51·7	42·7	38·4
12	39·1	38·4	34·4	43·8	51·3	69·2	65·0	72·3	*S*	49·7	41·4	*S*
13	42·7	41·7	41·2	43·4	52·8	*S*	65·4	69·9	65·0	56·0	40·2	42·0
14	38·0	*S*	*S*	45·0	53·7	72·3	66·4	68·4	66·0	58·0	*S*	41·8
15	37·8	39·0	42·8	51·0	53·7	75·0	72·1	*S*	65·7	58·5	42·0	40·5
16	42·0	39·0	46·4	55·2	*S*	76·5	69·0	66·8	65·6	56·4	40·9	40·0
17	*S*	38·3	46·2	52·0	55·1	73·3	67·0	68·4	65·0	*S*	41·5	38·5
18	39·1	36·5	46·9	*S*	56·0	66·0	*S*	69·0	63·2	52·3	39·8	44·8
19	41·0	35·3	46·9	51·8	55·7	67·0	67·0	68·8	*S*	54·2	36·5	*S*
20	44·8	35·2	48·8	54·0	56·2	*S*	66·2	65·2	60·8	56·3	37·0	42·5
21	38·7	*S*	*S*	54·0	59·4	67·8	65·4	61·6	60·8	54·3	*S*	45·0
22	38·7	36·0	45·2	56·8	58·2	70·5	66·0	*S*	62·8	54·8	37·3	46·0
23	36·3	36·3	45·8	56·6	*S*	71·4	67·4	65·0	63·7	53·0	34·0	46·0
24	*S*	38·1	60·2	56·2	54·8	68·0	66·3	65·0	61·2	*S*	34·0	44·0
25	35·7	35·5	47·0	*S*	53·7	66·8	*S*	64·6	57·5	53·7	39·8	Christ. Day
26	34·0	34·8	44·0	52·6	54·7	70·0	64·4	61·3	*S*	53·5	48·0	*S*
27	36·3	36·3	44·2	50·3	55·4	*S*	65·0	62·5	60·8	52·0	47·0	42·0
28	36·3	*S*	*S*	53·2	57·0	65·0	63·0	60·7	60·0	52·0	*S*	43·0
29	41·0		48·0	51·9	59·0	65·7	62·0	*S*	61·5	47·0	49·0	40·8
30	46·0		48·8	51·2	*S*	67·6	62·9	61·4	63·0	46·0	46·4	40·4
31	*S*		50·0		65·7		63·5	60·8		*S*		42·3
Means.	39·6	37·8	42·2	49·6	54·3	68·6	64·5	66·0	62·7	54·2	42·2	42·4

(VI.)—Reading of a Thermometer within the case covering the deep-sunk Thermometers, whose bulb is placed on a level with their scales, at the same times.

Day of the Month, 1858.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	42·8	34·5	32·4	43·4	49·9	82·2	64·8	*S*	67·0	62·5	38·5	45·5
2	43·7	34·2	32·1	Good Friday.	*S*	80·0	62·4	71·9	67·7	65·3	48·6	50·5
3	*S*	40·1	32·5	56·5	55·6	82·0	63·0	76·3	72·8	*S*	50·7	48·0
4	36·0	46·7	40·0	*S*	51·0	76·1	*S*	94·1	66·0	63·0	50·0	51·4
5	29·4	48·2	36·8	48·0	58·9	65·7	61·0	95·7	*S*	60·0	49·6	*S*
6	27·6	43·5	35·2	43·0	59·7	*S*	66·2	69·8	62·5	56·0	47·9	34·8
7	35·0	*S*	*S*	43·6	57·0	69·0	60·4	74·0	64·6	59·8	*S*	34·0
8	47·7	37·8	36·6	54·5	60·0	76·2	67·7	*S*	61·0	54·7	46·6	37·6
9	49·0	35·6	37·0	41·5	*S*	79·3	65·0	75·7	68·8	58·3	48·0	39·0
10	*S*	38·0	40·0	46·8	65·6	69·0	63·6	78·6	67·8	*S*	37·6	36·8
11	47·3	35·8	41·0	*S*	60·7	76·5	*S*	76·7	69·7	52·9	47·0	36·0
12	41·0	40·9	37·3	44·7	51·0	77·0	73·8	84·0	*S*	56·7	44·0	*S*
13	43·9	42·8	47·5	46·8	59·8	*S*	68·8	77·8	77·2	61·0	42·8	44·5
14	39·9	*S*	*S*	54·2	59·4	84·6	73·0	75·0	77·5	61·8	*S*	38·5
15	36·9	39·8	49·0	65·0	56·0	88·5	84·0	*S*	73·2	59·8	40·4	39·0

(VI.)—Reading of a Thermometer within the case covering the deep-sunk Thermometers—*concluded.*

Day of the Month, 1858.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
16	45 ·9	41 ·0	56 ·0	71 ·3	*S*	91 ·1	70 ·8	70 ·9	73 ·8	57 ·0	38 ·0	37 ·8
17	*S*	41 ·8	50 ·3	54 ·8	56 ·8	74 ·4	73 ·3	80 ·0	70 ·4	*S*	40 ·5	37 ·8
18	39 ·8	36 ·5	52 ·3	*S*	58 ·8	66 ·0	*S*	75 ·0	66 ·8	50 ·0	40 ·8	47 ·0
19	43 ·9	36 ·7	54 ·4	64 ·3	61 ·3	74 ·0	64 ·7	76 ·6	*S*	54 ·5	30 ·9	*S*
20	48 ·4	38 ·0	57 ·8	66 ·2	66 ·8	*S*	73 ·2	63 ·9	63 ·0	57 ·8	37 ·5	45 ·3
21	38 ·2	*S*	*S*	68 ·2	67 ·5	75 ·0	63 ·9	59 ·7	62 ·0	58 ·8	*S*	50 ·0
22	38 ·6	38 ·7	56 ·0	71 ·0	63 ·0	81 ·5	69 ·3	*S*	68 ·8	58 ·0	41 ·2	48 ·5
23	36 ·0	36 ·9	53 ·7	68 ·9	*S*	82 ·0	73 ·4	74 ·8	68 ·2	56 ·2	31 ·8	47 ·5
24	*S*	42 ·2	63 ·9	65 ·0	59 ·8	70 ·0	69 ·3	73 ·0	64 ·8	*S*	30 ·4	47 ·5
25	40 ·3	39 ·0	49 ·7	*S*	53 ·7	71 ·2	*S*	68 ·0	65 ·6	54 ·8	45 ·0	Christ. Day.
26	31 ·4	37 ·0	50 ·0	53 ·2	59 ·6	80 ·8	69 ·0	63 ·6	*S*	55 ·0	54 ·8	*S*
27	41 ·4	41 ·0	48 ·7	49 ·9	59 ·5	*S*	70 ·0	61 ·4	63 ·5	56 ·3	49 ·2	43 ·0
28	44 ·8	*S*	*S*	60 ·8	60 ·9	71 ·0	63 ·8	63 ·8	60 ·2	52 ·1	*S*	43 ·5
29	47 ·0		59 ·0	55 ·8	70 ·2	68 ·9	67 ·4	*S*	67 ·7	46 ·8	52 ·8	42 ·8
30	50 ·3		56 ·4	51 ·8	*S*	73 ·5	71 ·7	65 ·4	66 ·4	50 ·8	45 ·9	41 ·3
31	*S*		53 ·5		78 ·3		72 ·0	66 ·5		*S*		42 ·7
Means.	41 ·0	39 ·4	46 ·6	55 ·6	60 ·0	76 ·4	68 ·3	73 ·5	67 ·6	56 ·9	43 ·0	42 ·7

WEEKLY MEANS OF READINGS OF THERMOMETERS.

1858. Period.	Thermometers sunk in the ground.					Thermometer inclosed in the box which covers the scales of the deep-sunk Thermometers, and placed on a level with their scales.
	Bulb 24 French Feet deep.	Bulb 12 French Feet deep.	Bulb 6 French Feet deep.	Bulb 3 French Feet deep.	Bulb 1 Inch deep.	
d d	°	°	°	°	°	°
January 1 to 7	52·14	51·49	49·18	44·15	37·5	35·7
8 to 14	52·07	51·04	47·88	42·87	42·5	44·8
15 to 21	51·95	50·46	47·18	42·20	40·6	42·2
22 to 28	51·79	49·83	46·28	40·64	36·2	38·7
29 to February 4	51·67	49·27	45·27	40·16	40·4	42·0
February 5 to 11	51·51	48·64	44·97	40·43	38·4	39·8
12 to 18	51·35	48·11	44·31	39·71	38·8	40·5
19 to 25	51·16	47·61	43·85	39·16	36·1	38·6
26 to March 4	50·93	47·12	. .	...	34·9	35·8
March 5 to 11	50·72	46·59	...	...	35·9	37·8
12 to 18	50·55	46·15	...	...	42·9	48·7
19 to 25	50·33	45·73	...	42·54	49·0	55·9
26 to April 1	50·09	45·60	44·46	44·12	46·8	51·8
April 2 to 8	49·85	45·72	45·41	44·40	45·5	49·1
9 to 15	49·64	45·90	45·51	43·90	45·0	49·8
16 to 22	49·46	46·07	46·02	46·58	54·0	66·0
23 to 29	49·26	46·23	47·63	49·58	53·5	58·9
30 to May 6	49·10	46·66	48·72	49·40	50·0	54·5
May 7 to 13	48·98	47·11	49·05	49·85	52·4	59·0
14 to 20	48·87	47·47	49·69	50·87	55·1	69·8
21 to 27	48·85	47·86	50·59	52·62	56·0	60·5
28 to June 3	48·82	48·34	51·61	54·99	64·8	75·6
June 4 to 10	48·81	48·87	53·70	59·24	66·2	72·5
11 to 17	48·83	49·68	55·80	62·38	72·4	82·0
18 to 24	48·85	50·59	57·73	63·82	68·4	74·7
25 to July 1	48·94	51·57	58·79	64·12	66·7	71·7
July 2 to 8	49·02	52·39	59·19	62·61	62·1	63·4
9 to 15	49·19	53·13	58·82	61·25	64·6	71·4
16 to 22	49·35	53·56	59·18	63·46	66·8	69·2
23 to 29	49·57	53·98	59·89	63·44	64·7	68·8
30 to August 5	49·78	54·48	59·99	62·89	65·8	80·3
August 6 to 12	50·01	54·87	60·32	63·97	68·0	76·5
13 to 19	50·23	55·24	60·98	64·94	68·5	75·9
20 to 26	50·44	55·58	61·15	63·94	63·8	67·2
27 to September 2	50·62	55·90	60·76	62·26	61·6	65·3
September 3 to 9	50·84	56·13	60·24	61·37	62·5	65·9
10 to 16	51·08	56·24	59·94	61·56	65·0	73·2
17 to 23	51·26	56·22	60·04	61·64	62·7	66·5
24 to 30	51·46	56·32	59·71	60·43	60·7	64·7
October 1 to 7	51·74	56·32	59·17	59·29	56·8	61·1
8 to 14	51·83	56·23	58·23	56·52	54·0	57·6
15 to 21	51·90	56·03	57·17	55·98	55·3	56·3
22 to 28	52·09	55·72	56·55	55·17	53·2	55·4
29 to November 4	52·17	55·37	55·53	52·29	45·6	47·6
November 5 to 11	52·23	54·94	53·92	49·92	45·0	46·1
12 to 18	52·26	54·30	52·26	47·16	44·3	44·4
19 to 25	52·31	53·58	50·53	44·38	36·4	36·1
26 to December 2	52·34	52·85	49·15	44·72	47·2	49·8
December 3 to 9	52·32	52·07	49·11	45·55	41·7	40·8
10 to 16	52·27	51·50	48·57	44·13	40·4	38·8
17 to 23	52·22	51·03	47·97	44·17	43·8	46·0
24 to 31	52·08	50·40	47·65	44·06	42·1	43·5

ABSTRACT OF THE CHANGES OF THE DIRECTION OF THE WIND, AS DERIVED FROM OSLER'S ANEMOMETER.

By *direct* motion, in the following statements, is meant that the change of the direction of the wind was in the order N., E., S., W., N., &c.; by *retrograde* is meant in the order N., W., S., E., N., &c.

1857. Dec. 31^{d}. 12^{h}. The direction of the wind was S.E.
1858. Jan. 31. 12. ,, ,, W., which implies a direct motion of 135°.
Therefore the whole excess of direct motion in the month of January was 135°.

1858. Jan. 31^{d}. 12^{h}. The direction of the wind was W.
Feb. 28. 12. ,, ,, E.N.E., which implies a direct motion of $157\frac{1}{2}$°.
On Feb. 27. 22, the trace was shifted to the next set of lines upwards, which implies apparent retrograde motion of 360°.
Therefore the whole excess of retrograde motion in the month of February was $202\frac{1}{2}$°.

1858. Feb. 28^{d}. 12^{h}, the direction of the wind was E.N.E.
March 31. 12. ,, ,, S.W., which implies a retrograde motion of $202\frac{1}{2}$°.
On March 19. 22, 23^{d}. 22^{h}, 25^{d}. 22^{h}, 27^{d}. 22^{h}, the trace was shifted to the next set of lines downwards, implying direct motion of 1440°.
Therefore the whole excess of direct motion in the month of March was $1237\frac{1}{2}$°.

1858. March 31^{d}. 12^{h}. The direction of the wind was S.W.
April 30. 12. ,, ,, S.S.W., which implies a retrograde motion of $22\frac{1}{2}$°.
On April 7. 22, the trace was shifted to the second set of lines downwards; and on April 20^{d}. 22^{h}, 23^{d}. 22^{h}, 25^{d}. $6\frac{1}{2}^{h}$, 27^{d}. 22^{h}, the trace was shifted to the next set of lines downwards, implying direct motion of 2160°.
Therefore the whole excess of direct motion in the month of April was $2137\frac{1}{2}$°.

1858. April 30^{d}. 12^{h}. The direction of the wind was S.S.W.
May 31. 12. ,, ,, S.S.W., which implies a retrograde motion of 360°.
Therefore the whole excess of retrograde motion in the month of May was 360°.

1858. May 31^{d}. 12^{h}. The direction of the wind was S.S.W.
June 30. 12. ,, ,, N.N.W., which implies a direct motion of 135°.
On June 2. 22, 8^{d}. 22^{h}, 16^{d}. 22^{h}, 22^{d}. 22^{h}, the trace was shifted to the second set of lines downwards; and on June 11^{d}. 22^{h}, 15^{d}. 22^{h}, 18^{d}. 22^{h}, 21^{d}. 22^{h}, 24^{d}. $21\frac{1}{2}^{h}$, to the next set of lines downwards; on June 5^{d}. 22^{h}, to the second set of lines upwards; and on 10^{d}. 22^{h}, to the next set of lines upwards.
Therefore the whole excess of direct motion in the month of June was 3735°.

1858. June 30^{d}. 12^{h}. The direction of the wind was N.N.W.
July 31. 12. ,, ,, E.S.E., which implies a direct motion of 135°.
On July 6. 22, 8^{d}. $8\frac{1}{4}^{h}$, 17^{d}. 22^{h}, 27^{d}. 22^{h}, 28^{d}. $2\frac{3}{4}^{h}$, the trace was shifted to the next set of lines upwards; and on 30^{d}. 22^{h}, to the second set of lines upwards; on 7^{d}. $2\frac{3}{4}^{h}$, 7^{d}. $8\frac{1}{2}^{h}$, 15^{d}. 21^{h}, 18^{d}. 6^{h}, 19^{d}. 22^{h}, to the next set of lines downwards.
Therefore the whole excess of retrograde motion in the month of July was 585°.

1858. July 31^{d}. 12^{h}. The direction of the wind was E.S.E.
Aug. 31. 12. ,, ,, S.W., which implies a retrograde motion of $247\frac{1}{2}$°.
On Aug. 1. 22, 12^{d}. 22^{h}, the trace was shifted to the second set of lines downwards; on 18^{d}. 2^{h}, to the next set of lines downwards; on 8^{d}. 22^{h}, 17^{d}. 1^{h}, 22^{d}. 22^{h}, to the next set of lines upwards.
Therefore the whole excess of direct motion in the month of August was $472\frac{1}{2}$°.

1858. Aug. $\overset{d}{31}$. $\overset{h}{12}$. The direction of the wind was S.W.
Sept. 30. 12. ,, ,, **W.**, which implies a direct motion of 45°.
On Sept. 8. 22, 17^{d}. 22^{h}, 28^{d}. 22^{h}, the trace was shifted to the next set of lines downwards; on 12^{d}. 22^{h}, 18^{d}. 22^{h}, to the next set of lines upwards.

Therefore the whole excess of direct motion in the month of September was 405°.

1858. Sept. $\overset{d}{30}$. $\overset{h}{12}$. The direction of the wind was **W.**
Oct. 31. 12. ,, ,, N.E., which implies a direct motion of 135°.
On Oct. 18. 22, 25^{d}. 22^{h}, the trace was shifted to the next set of lines downwards; on 23^{d}. 22^{h}, 26^{d}. 22^{h}, to the next set of lines upwards.

Therefore the whole excess of direct motion in the month of October was 135°.

1858. Oct. $\overset{d}{31}$. $\overset{h}{12}$. The direction of the wind was N.E.
Nov. 30. 12. ,, ,, **W.S.W.**, which implies a retrograde motion of 157½°.
On Nov. 0. 22. 2^{d}. 22^{h}, 3^{d}. 22^{h}. 9^{d}. 22^{h}, 25^{d}. 22^{h}, the trace was shifted to the next set of lines downwards; on 5^{d}. 22^{h}, 16^{d}. 22^{h}, to the next set of lines upwards.

Therefore the whole excess of direct motion in the month of November was 922½°.

1858. Nov. $\overset{d}{30}$. $\overset{h}{12}$. The direction of the wind was **W.S.W.**
Dec. 31. 12. ,, ,, S., which implies a retrograde motion of 67½°.
On Dec. 10. 22, 14^{d}. 22^{h}, the trace was shifted to the next set of lines downwards.

Therefore the whole excess of direct motion in the month of December was 652½°.

The whole excess of direct motion to the end of the year was 8685°.

The revolution-counter which is attached to the vertical spindle of the vane, whose readings increase with change of direction of the wind in the order N., E., S., **W.**, &c., or in direct motion, and decrease with change of direction in the order N., **W.**, S., E., &c., or in retrograde motion, gave the following readings:—

	rev.
On 1858. January 1	3·8
December 31	27·8

Implying an excess of direct motion, during the year, of 24 revolutions, or 8640°.

AMOUNT OF RAIN COLLECTED IN EACH MONTH OF THE YEAR 1858.

1858, MONTH.	Monthly Amount of Rain collected in each Gauge.			
	Osler's Anemometer Gauge.	On the Roof of the Library.	Crosley's.	Cylinder partly sunk in the Ground.
	in.	in.	in.	in.
January - -	0 ·3	0 ·6	0 ·7	0 ·8
February - -	1 ·5	1 ·7	1 ·7	1 ·7
March - -	0 ·2	0 ·4	0 ·7	0 ·8
April - -	1 ·2	2 ·3	1 ·9	2 ·3
May - - -	0 ·6	1 ·7	1 ·6	2 ·0
June - - -	1 ·2	1 ·5	1 ·2	1 ·2
July - - -	1 ·9	2 ·8	2 ·7	3 ·0
August - -	0 ·2	1 ·5	1 ·5	1 ·5
September - -	0 ·6	0 ·6	0 ·9	0 ·9
October - -	0 ·7	1 ·0	1 ·2	1 ·4
November - -	0 ·4	0 ·4	0 ·5	0 ·5
December - -	1 ·1	1 ·2	1 ·5	1 ·7
Sums - -	9 ·9	15 ·7	16 ·1	17 ·8

The heights of the receiving surfaces are as follows:

	Above the Mean Level of the Sea. Ft.	In.	Above the Ground. Ft.	In.
Osler's Anemometer Gauge	205	6	50	8
Gauge on the Roof of the Library.....................	177	2	22	4
Crosley's Gauge.................................	156	6	1	8
Cylinder Gauge..................................	155	3	0	5

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RESULTS

OF THE

MAGNETICAL AND METEOROLOGICAL

OBSERVATIONS

MADE AT

THE ROYAL OBSERVATORY, GREENWICH,

1859.

(EXTRACTED FROM THE GREENWICH OBSERVATIONS, 1859.)

ROYAL OBSERVATORY, GREENWICH.

INDICATIONS

OF

MAGNETOMETERS.

1859.

The establishment of Assistants in the Magnetical and Meteorological Department of the Royal Observatory consisted during the year 1859, of Mr. James Glaisher, the Superintendant, and Mr. Thomas Downs; with three supernumerary assistants, to aid in the observations and reductions.

For description of the three Magnetometers, the method of observing by the Telescope, and the method of reducing the observations, the reader is referred to the *Greenwich Magnetical and Meteorological Observations* for 1847, Introduction, page i to xlii; and to corresponding parts of the preceding volumes.

During the year 1859, Telescope-Observations of the Magnetometers have usually been made four times every day, except on Sundays, on which days two or three observations only have been taken; but, though these observations are employed in forming the base-lines on the Photographic sheets, their immediate results are not necessarily given in the following pages.

Observations were made of the reading of the Horizontal Circle of the Theodolite by which the DECLINATION MAGNET is observed, corresponding to the Astronomical Meridian, on January 8, 31, February 23, March 9, May 5, 11, 12, 30, July 9, 21, August 13, 27, September 17, October 22, November 24, and December 24.

Observations were made of the Collimation of the DECLINATION MAGNETOMETER; of the Torsion-force of its Suspension skein; and of the Collimation of the Theodolite-Telescope; on 1858, December 29, 30, and 31.

Observations of the Angle of Torsion of the HORIZONTAL FORCE MAGNETOMETER were made on 1859, January 3, 4, and 5. The angle determined was 43°. 19′. Observations were made for the times of vibration and readings of the scale for different readings of the torsion-circle on the same days, and the general conclusion was, that the scale-readings were identical and had nearly the same value when the reading of the torsion-circle was 144°. 0′ (marked end West); and 230°. 30′ (marked end East). The reading adopted for the adjustment of the torsion-circle throughout the year (marked end West) was 143°. 0′.

The number used for the variation of horizontal force for a disturbance through one division of the scale, in parts of the whole horizontal force, is 0·0020524.

The correction for temperature is $0{\cdot}0000809 \times (t-32) + 0{\cdot}000000762\ (t-32)^2$, where t is the temperature in degrees of Fahrenheit's scale. This formula, which represents the mean of the results deduced from temperature-experiments made with each end of the magnet alternately near the measuring apparatus, is preferable to that given in the volumes before 1850, which were based on experiments made in one position of the magnet. The correction for temperature is *not* applied to any of the results of observation.

Observations of the times of vibration of the VERTICAL FORCE MAGNETOMETER have usually been made three or four times a week. The adopted time of vibration till January 30, was $16^{s}{\cdot}2$; and from April 19 to the end of the year $15^{s}{\cdot}9$.

Observations for the time of vibration in a horizontal plane were made in 1858, December 27 and 28, when the time of vibration was found to be $24^{s}{\cdot}364$ from 2000 vibrations; and again on 1859, April 19, when the time of vibration was found to be $24^{s}{\cdot}258$ from 700 vibrations.

The values of the disturbing force, in terms of the whole vertical force, for one division of the scale, are inferred to be 0·001423 till January 30; and 0·001465 from April 19 to the end of the year: and these numbers have been used throughout their respective periods.

The correction for temperature is $0·00013845 \times (t-32) + 0·000004054 + (t - 32)^2$. This formula, like that for the Horizontal Force Magnetometer, is deduced from temperature-experiments made in both positions of the magnet. The correction is ***not*** applied to any of the results of observation.

The methods adopted in the use of the Photographic Apparatus; in the determination of zeros, both for time and for magnetic indications; and in the translation into numbers of the indications given by the Photographic Traces for arbitrary times; are in every respect the same as those described in the Addendum to the Introduction to the *Greenwich Magnetical and Meteorological Observations*, 1847, pages lxxxiii to xc. The only important alterations that have been made are, that (as mentioned at the end of that Introduction) coal-gas charged with the vapour of coal-naphtha is used to give the light required for forming the Photographic Trace; and that the cylinders carrying the Photographic paper (both that which receives the traces of the Declination Magnet and the Horizontal Force Magnet, and that which receives the traces of the Vertical Force Magnet and the Barometer), are now made to revolve in 24^h. It may be mentioned also that, commencing with the year 1858, the observations are referred to Greenwich Mean Time instead of Göttingen Mean Time as heretofore.

It is proper to add, that, in measuring the ordinates of the Vertical Force Curves, the same difficulty that is mentioned in preceding volumes has still occasionally been felt. Apparently without cause, the curve is dislocated; one part being raised above or depressed below the contiguous part, in the direction of the ordinate, usually by small quantities. In all cases the displacement is accompanied by vibration, the original position being at the extremity of the arc of vibration, and the new position being at its center; showing that there has been no want of delicacy in the movement, and that the change is precisely the same as would be caused by the quiet application of a small weight upon one end of the magnet.

In general the ordinates of the Photographic Curves have been measured so frequently, including all maxima and minima, that a reader, laying down a succession of points by means of the given times as abscissæ and the given measures of force as ordinates, connecting these points by straight lines, and attending to the symbols as explained in the foot notes, will very nearly produce the original curves.

At the times when the Vertical Force Trace is dislocated, two ordinates have been taken for the same abscissæ; these are connected by a brace, and the difference of the numbers indicates the amount of the disturbance.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 1								
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 26. 25							
0. 7	26. 15							
0. 30	28. 10							
0. 38	27. 30							
1. 0	27. 10							
	***							
2. 21	26. 25							
3. 10	25. 10							
5. 15	22. 30							
6. 35	22. 30							
9. 23	21. 50							
9. 45	21. 10							
10. 4	22. 5							
10. 23	21. 25							
11. 17	22. 35							
12. 51	22. 35							
13. 34	21. 40							
14. 28	22. 0							
14. 47	22. 35							
17. 19	23. 5							
20. 48	21. 55							
21. 7	23. 0							
22. 13	24. 0							
	***							
23. 35	26. 0							
	(†)							
Jan. 2								
6. 37	21. 26. 47*							
21. 0	23. 56*							
Jan. 3								
	(†)							
1. 0	21. 29. 16*							
3. 5	28. 0							
4. 15	26. 10							
6. 7	26. 0							
	***							
7. 9	25. 0							
7. 42	24. 5							
8. 46	23. 10							
12. 15	24. 30							
	***							
14. 54	26. 45							
15. 50	24. 35							
	***							
17. 10	24. 25							
	***							
19. 58	24. 0							
20. 37	23. 30							
21. 40	26. 0							
22. 0	25. 0							
23. 15	26. 0							
23. 59	26. 5							
Jan. 4								
0. 0	21. 26. 5							
0. 38	27. 20							
1. 12	21. 29. 0							
2. 10	29. 0							
	***							
3. 48	26. 25							
4. 7	26. 20							
5. 27	25. 15							
5. 48	25. 30							
6. 26	24. 25							
	***							
7. 55	24. 50							
	***							
8. 29	26. 0							
	***							
9. 33	23. 10							
9. 53	24. 0							
	***							
11. 20	21. 0							
11. 47	22. 5							
12. 8	21. 30							
13. 4	24. 55							
13. 30	23. 20							
14. 12	25. 20							
	***							
18. 5	25. 0							
	***							
21. 7	23. 30							
22. 47	26. 25							
	***							
23. 59	27. 0							
Jan. 5				Jan. 5		Jan. 5		
0. 0	21. 27. 0				(†)	3. 0		51 ·8
	***			2. 13	·02968	9. 0		51 ·0
0. 52	28. 5			3. 7	·02890	21. 0		46 ·5
	***			4. 13	·02874			
2. 13	26. 10			4. 26	·02930			
2. 40	27. 5			5. 6	·02911			
3. 32	24. 30			10. 51	·03123			
5. 34	23. 30			12. 36	·03221			
6. 38	23. 25			21. 26	·03129			
8. 13	21. 30			23. 33	·03052			
16. 18	24. 0			23. 59	·03007			
	***							
21. 7	20. 35							
	***							
23. 16	25. 5							
	(†)							
Jan. 6				Jan. 6		Jan. 6		
1. 0	21. 26. 54*			0. 0	·03007	1. 0		50 ·0
3. 0	26. 51*			1. 32	·02866	3. 0	52 ·0	53 ·0
9. 0	24. 41*			3. 9	·02923	9. 0	48 ·2	48 ·7
21. 0	24. 18*			3. 46	{ ·02916 ·03011	21. 0	44 ·0	44 ·8
				4. 50	·02982			
				7. 30	·03060			
				8. 40	·03147			
				16. 46	·03059			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Till January 5 the Vertical Force Magnet and the Horizontal Force Magnet were under adjustment.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
				Jan. 6				
h m	° ′ ″	h m		h m		h m	°	°
				22. 0	·03091			
				23. 59	·02983			
Jan. 7		Jan. 7		Jan. 7		Jan. 7		
0. 0	21. 29. 55	1. 0	·0898	0. 0	·02983	1. 0	48·0	48·0
0. 16	31. 20	3. 6	·0901	2. 15	·02795	3. 0	49·8	50·0
0. 43	31. 30	3. 46	·0897	2. 57	{ ·02821	9. 0	48·3	49·0
1. 11	31. 0	5. 0	·0897		·02948	21. 0	42·0	43·2
1. 42	30. 35		***	7. 45	·03038			
1. 46	30. 5	7. 43	·0910	11. 20	·03150			
3. 13	28. 20	8. 9	·0906	18. 21	·03047			
3. 17	28. 30	8. 37	·0913	21. 33	·03029			
3. 58	27. 50		***	23. 3	·03039			
5. 13	27. 30	10. 46	·0919	23. 59	·03018			
6. 12	27. 55		***					
6. 15	28. 35	11. 41	·0917					
7. 10	28. 0		***					
7. 37:	25. 25	17. 18	·0931					
8. 7	27. 50		***					
8. 18	26. 50	18. 15	·0931					
8. 30	27. 10		***					
8. 47	26. 45	19. 45	·0933					
	***	22. 22	·0909					
9. 15	27. 50	23. 59	·0904					
	***							
10. 18	26. 30							
	***							
10. 33	27. 20							
11. 28	27. 0							
11. 36	26. 30							
11. 43	27. 20							
16. 18	27. 55							
	***							
19. 58	25. 0							
	***							
20. 50	23. 30							
	***							
23. 59	28. 50							
Jan. 8		Jan. 8		Jan. 8		Jan. 8		
0. 0	21. 28. 50	0. 0	·0904	0. 0	·03018	1. 0	44·7	46·0
	***	0. 29	·0907	1. 40	·02870	3. 0	47·0	49·0
1. 16	30. 30	3. 28	·0907	2. 39	·02742	9. 20	47·0	47·5
2. 40	29. 5	3. 42	·0905	3. 34	·02795	22. 45	41·0	43·0
3. 2	28. 45	4. 36	·0911	5. 27	{ ·02771			
3. 58	27. 10	5. 14	·0908		·02868			
4. 12	27. 10	6. 12	·0914	6. 26	·02846			
4. 56	27. 40	6. 30	·0912	11. 18	·02980			
5. 30	26. 45	7. 40	·0916	14. 34	·03137			
5. 42	27. 15	8. 30	·0911	23. 59	·03034			
5. 48	26. 55	9. 43	·0914					
6. 15	29. 0	10. 27	·0921					
6. 18	27. 0	10. 58	·0917					
6. 27	27. 40	11. 15	·0921					
6. 36	29. 25	11. 22	·0918					
7. 29	29. 10		***					
7. 43	30. 0	12. 2	·0919					
7. 48	29. 50	12. 42	·0913					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 8		Jan. 8						
h m	° ′ ″	h m		h m		h m	°	°
8. 15	21. 30. 30	16. 10	·0920					
8. 33	30. 20	16. 29	·0925					
8. 48	29. 5	19. 28	·0925					
10. 20	27. 35	21. 16	·0918					
10. 34	27. 5	21. 30	·0921					
11. 5	26. 0	22. 10	·0917					
11. 16	26. 50		***					
11. 42	25. 10	23. 13	·0927					
	***	23. 23	·0922					
12. 15	24. 40	23. 45	·0932					
13. 12	26. 5	23. 59	·0930					
13. 30	25. 30							
13. 38	26. 20							
14. 6	25. 25							
	***							
14. 47	25. 50							
14. 58	25. 40							
	***							
16. 15	26. 50							
16. 45	25. 0							
	***							
18. 55	26. 55							
	***							
20. 10	26. 20							
	***							
22. 15	27. 30							
22. 45	32. 35							
23. 5	31. 15							
23. 15	32. 30							
23. 22	30. 5							
23. 37	30. 15							
23. 50	33. 25							
23. 59	33. 30							
Jan. 9		Jan. 9		Jan. 9		Jan. 9		
0. 0	21. 33. 30	0. 0	·0929	0. 0	·03034	9. 0	42·7	44·0
0. 18	30. 20	0. 18	·0922	1. 45	·03049	21. 0	40·0	40·6
0. 34	30. 30	0. 30	·0924	3. 25	·03008			
0. 43	29. 5	0. 41	·0919	9. 36:	·02824			
0. 48	30. 0	1. 40	·0922	16. 2	·03013			
1. 43	29. 0	1. 48	·0927	19. 7	·03001			
1. 57	29. 30	3. 9	·0924	22. 32	·03013			
3. 18	28. 10	3. 14	·0935	23. 46	·02890			
3. 27	28. 45		***		(†)			
3. 45	28. 0	4. 40	·0925					
5. 50	27. 25		***					
6. 2	26. 55	8. 22	·0930					
6. 35	28. 0	10. 30	·0927					
7. 42	26. 30		***					
7. 58	26. 50	11. 13	·0933					
8. 13	26. 15	11. 23	·0930					
	***	11. 59	·0934					
10. 18	26. 15	12. 28	·0921					
	***	13. 5	·0928					
11. 16	24. 0	13. 23	·0925					
11. 42	26. 30	13. 42	·0931					
12. 17	25. 5	14. 20	·0931					
	***		***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declina-tion.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermo-meters.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 9		Jan. 9						
h m	° ′ ″	h m		h m		h m	°	°
13. 7	21. 26. 10	16. 28	·0946					
13. 15	27. 35		***					
13. 23	27. 35	18. 0	·0945					
13. 30	26. 50	18. 21	·0940					
13. 39	26. 50	19. 40	·0936					
13. 45	27. 35	20. 0	·0931					
14. 8	26. 20	21. 10	·0912					
	***		***					
15. 12	26. 0	23. 59	·0900					
	***							
15. 48	28. 5							
	***							
16. 14	28. 25							
16. 27	24. 30							
	***							
17. 23	26. 20							
17. 37	26. 35							
	***							
18. 3	26. 30							
18. 15	29. 30							
18. 30	28. 25							
19. 50	28. 50							
20. 48	28. 50							
21. 30	32. 55							
	***							
23. 17	35. 0							
	***							
23. 59	35. 55							
Jan. 10		Jan. 10		Jan. 10		Jan. 10		
0. 0	21. 35. 55	0. 0	·0900		(†)	1. 0	44·0	45·0
0. 13	36. 0	0. 13	·0893	1. 0	·02776*	3. 0	47·0	48·0
0. 17	34. 30	0. 43	·0900	3. 7	·02861	9. 0	47·0	48·0
	***	1. 13	·0902	3. 25	·02890	21. 0	45·0	46·2
0. 43	35. 0	1. 35	·0894	4. 4	{·02877 ·02961			
	***		***					
1. 5	32. 40	2. 37	·0897	4. 40	·02947			
	***		***	5. 3	·02981			
1. 37	34. 10	3. 29	·0880	5. 37	·02918			
1. 44	38. 10	3. 42	·0891	7. 15	·02871			
1. 58	32. 55	3. 51	·0876	11. 53	·02869			
3. 15	33. 20	4. 9	·0886	14. 10	·02885			
3. 20	32. 0	4. 14	·0874	15. 3	·02868			
3. 30	32. 55	4. 40	·0888	22. 15	·03019			
3. 39	32. 5	4. 53	·0853	23. 59	·02877			
3. 56	33. 50	5. 15	·0896					
4. 10	26. 25	5. 27	·0887					
4. 18	31. 30	5. 45	·0886					
4. 30	28. 0	5. 57	·0895					
4. 47	33. 40	6. 7	·0894					
5. 15	11. 15	6. 30	·0900					
5. 36	22. 35	6. 46	·0909					
	***	6. 58	·0895					
6. 38	27. 40	7. 15	·0900					
	***	7. 21	·0898					
8. 32	25. 20	7. 38	·0901					
8. 43	22. 50	7. 46	·0911					

Greenwich Mean Solar Time.	Western Declina-tion.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermo-meters.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 10		Jan. 10						
h m	° ′ ″	h m		h m		h m	°	°
8. 55	21. 22. 10	7. 58	·0906					
9. 7	23. 30		***					
	***	8. 58	·0903					
9. 48	21. 25	9. 28	·0909					
9. 52	23. 20	9. 42	·0905					
10. 20	17. 55	9. 56	·0909					
10. 33	18. 30	10. 0	·0907					
10. 46	18. 0	10. 19	·0911					
11. 17	20. 45	10. 30	·0905					
11. 25	20. 40	10. 46	·0903					
	***	11. 5	·0909					
11. 32	18. 30	11. 18	·0904					
11. 48	21. 20		***					
	***	12. 26	·0909					
12. 17	21. 50		***					
	***	13. 25	·0902					
13. 7	19. 30	13. 41	·0909					
13. 23	22. 40	13. 54	·0902					
13. 40	23. 35	14. 29	·0914					
13. 58	29. 0	14. 44	·0910					
	***	15. 4	·0915					
14. 21	28. 20	15. 13	·0909					
14. 45	22. 45	15. 25	·0908					
15. 2	24. 50		***					
15. 30	22. 10	16. 26	·0917					
	***	16. 39	·0923					
16. 50	25. 30		***					
	***	17. 13	·0914					
18. 5	26. 10		***					
	***	19. 13	·0913					
20. 57	25. 10	20. 0	·0911					
	***	20. 9	·0906					
22. 30	31. 0	20. 14	·0911					
	***		***					
23. 13	31. 20	21. 54	·0894					
23. 19	33. 25	22. 0	·0896					
	***		***					
23. 37	33. 50	23. 42	·0881					
23. 46	35. 0	23. 55	·0863					
	***	23. 59	·0864					
23. 59	33. 0							
Jan. 11		Jan. 11		Jan. 11		Jan. 11		
0. 0	21. 33. 0	0. 0	·0864	0. 0	·02877	1. 0	49·5	50·0
0. 7	34. 5	0. 9	·0871	0. 27	·02832	3. 0	52·8	53·0
0. 16	31. 10	0. 15	·0868	3. 25	·02992	9. 0	53·5	54·0
	***	0. 40	·0883	6. 0	·03021	21. 0	50·0	51·0
1. 33	32. 30	0. 52	·0882	9. 10	·03120			
	***	1. 22	·0889	11. 29	·03159			
1. 52	34. 25		***	12. 40	·03120			
2. 8	33. 15	2. 4	·0890	16. 36	·03233			
2. 14	34. 20	2. 11	·0895	16. 58	·03224			
	***	2. 16	·0887	18. 25	·03266			
2. 33	31. 0	2. 54	·0888	21. 33	·03291			
2. 52	30. 25	3. 3	·0884	22. 26	·03305			
3. 4	29. 10	3. 17	·0889	23. 59	·03236			
	***	3. 40	·0882					
3. 20	31. 5		***					

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Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet	Of V. F. Magnet
Jan. 11		Jan. 11						
h m	° ′ ″	h m		h m		h m	°	°
3. 42	21. 28. 0 ***	4. 18	·0896 ***					
4. 13	27. 10	4. 51	·0895					
5. 19	27. 50	5. 0	·0899 ***					
6. 6	26. 20	6. 53	·0889 ***					
6. 18	26. 30	8. 13	·0893					
6. 45	25. 0	8. 28	·0902					
6. 58	25. 0	8. 59	·0895					
7. 13	24. 45	9. 13	·0897					
7. 25	24. 10	9. 38	·0899					
7. 43	20. 50	9. 50	·0894 ***					
7. 50	20. 35	10. 42	·0903					
8. 8	18. 20 ***	10. 53	·0898					
8. 57	23. 0 ***	11. 18	·0917					
9. 33	23. 45 ***	11. 30	·0915					
10. 0	24. 55	11. 54	·0926					
10. 12	22. 50	12. 30	·0909 ***					
10. 23	23. 0	13. 27	0903					
10. 38	22. 45	13. 45	·0907					
10. 42	21. 50	14. 16	·0903					
11. 12	25. 40	14. 39	·0908					
11. 18	24. 30	15. 11	·0901					
11. 27	26. 0	16. 27	·0917					
11. 46	26. 20	16. 30	·0915					
12. 15	23. 5	16. 58	·0917					
12. 36	23. 15	17. 17	·0910 ***					
12. 50	25. 40	19. 0	·0915 ***					
13. 26	21. 50	19. 39	·0912					
13. 53	25. 25	19. 59	·0916					
14. 19	24. 30	20. 44	·0903					
14. 50	26. 10	21. 16	·0905 ***					
15. 17	28. 10	23. 43	·0895					
15. 30	25. 30 ***	23. 59	·0899					
15. 44	26. 10							
16. 7	34. 5							
16. 32	27. 20							
16. 53	25. 50 ***							
20. 0	28. 0							
20. 13	26. 45 ***							
22. 56	29. 35							
23. 13	27. 40							
23. 27	28. 5							
23. 47	26. 10							
23. 59	29. 0							
Jan. 12		Jan. 12		Jan. 12		Jan. 12		
0. 0	21. 29. 0	0. 0	·0899	0. 0	·03236	1. 0	53 ·0	54 ·0
0. 20	28. 15 ***	0. 21	·0895 ***	1. 50	·03107 ·03188	3. 0	55 ·0	56 ·0
0. 45	30. 20	1. 27	·0901	2. 21	·03170	9. 0	55 ·0	55 ·5
1. 5	29. 25	1. 32	·0896 ***	6. 11	·03129	21. 0	50 ·2	51 ·0
1. 30	32. 25			9. 15	·03188			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet	Of V. F. Magnet
Jan. 12		Jan. 12		Jan. 12				
h m	° ′ ″	h m		h m		h m	°	°
1. 37	21. 30. 0 ***	2. 15	·0891 ***	12. 25	·03300			
2. 12	30. 40 ***	2. 49	·0891	21. 49	·03261			
3. 11	29. 25 ***	3. 0	·0898	23. 59	·03231			
3. 45	26. 20	3. 13	·0894					
4. 20	26. 30	3. 41	·0893					
4. 42	30. 55	4. 13	·0900					
5. 40	31. 10	4. 45	·0900					
6. 15	23. 15	5. 4	·0903					
7. 0	26. 0	5. 57	·0900					
9. 58	26. 45	6. 19	·0906					
10. 13	26. 0	7. 30	·0908					
10. 45	27. 0	9. 58	·0907					
11. 3	26. 10	10. 10	·0910 ***					
12. 37	26. 0 ***	11. 30	·0910 ***					
15. 36	26. 45	12. 44	·0916 ***					
15. 53	29. 30	13. 41	·0912 ***					
16. 38	26. 45	18. 52	·0919					
17. 0	27. 0	20. 12	·0913 ***					
17. 13	26. 20	22. 15	·0891					
20. 5	25. 25	23. 59	·0896					
20. 36	24. 45							
21. 7	24. 10 ***							
23. 4	29. 25							
23. 35	29. 20							
23. 59	31. 50							
Jan. 13		Jan. 13		Jan. 13		Jan. 13		
0. 0	21. 31. 50	0. 0	·0896 ***	0. 0	·03231	1. 0	52 ·2	53 ·0
0. 11	31. 0 ***	1. 23	·0902	1. 37	·03163	3. 0	54 ·0	55 ·0
1. 13	31. 40 ***	1. 49	·0899 ***	5. 9	·02895	9. 0	52 ·0	53 ·0
2. 45	27. 20 ***	2. 22	·0900 ***	5. 42	·02890 ·02989	21. 0	46 ·0	47 ·2
4. 18	26. 15 ***	3. 0	·0908	8. 20	·03032			
6. 16	27. 55 ***	3. 53	·0907	11. 57	·03226			
8. 34	28. 30	5. 21	·0911	21. 15	·03138			
9. 3	27. 0	5. 30	·0909	23. 59	·03144			
9. 15	27. 40	6. 45	·0912 ***					
9. 30	26. 50 ***	9. 43	·0912					
10. 8	27. 50 ***	9. 49	·0915					
11. 30	27. 25	17. 51	·0930					
17. 50	27. 20	19. 40	·0928					
20. 0	26. 5	22. 0	·0917					
21. 30	25. 45	23. 2	·0921 (†)					
23. 20	28. 50							
23. 45	29. 40							
23. 59	29. 55							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 14		Jan. 14		Jan. 14		Jan. 14		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 29. 55		(†)	0. 0	·03144	1. 0	48 ·0	49 ·0
1. 25	29. 55	1. 0	·0930*	2. 22	·03068	3. 0	49 ·0	50 ·0
2. 26	27. 50	2. 45	·0925 ***	7. 2:	·02813	9. 0	49 ·0	49 ·5
2. 43	27. 40	3. 55	·0927 ***	12. 50	·03118	21. 0	43 ·5	44 ·0
3. 0	27. 5	5. 15	·0923 ***	23. 59	·02994			
4. 48	26. 45	8. 8	·0931					
6. 40	27. 30 ***	8. 16	·0927					
9. 57	27. 45	8. 57	·0931					
10. 18	27. 0 ***	9. 10	·0928 ***					
15. 18	29. 20 ***	11. 56	·0933 ***					
16. 20	25. 30 ***	13. 51	·0932					
17. 5	25. 40 ***	16. 50	·0943					
17. 12	25. 0 ***	18. 45	·0935					
19. 0	25. 35	19. 1	·0937					
19. 17	27. 10	19. 13	·0932 ***					
19. 27	26. 30	20. 0	·0936					
20. 0	28. 0	20. 14	·0931 ***					
20. 46	26. 20	22. 45	·0923 ***					
21. 3	27. 55	23. 11	·0911					
21. 12	27. 20	23. 28	·0920					
21. 34	29. 10	23. 45	·0914					
22. 45	30. 25	23. 52	·0921					
23. 12	35. 0	23. 59	·0919					
23. 18	34. 25							
23. 33	37. 50							
23. 40	36. 30							
23. 47	39. 50							
23. 59	38. 0							
Jan. 15		Jan. 15		Jan. 15		Jan. 15		
0. 0	21. 38. 0	0. 0	·0919	0. 0	·02994	1. 0	47 ·0	48 ·0
0. 10	35. 50 ***	0. 11	·0924	2. 10	{ ·02790 ·02721	3. 0	49 ·0	50 ·0
0. 48	35. 20	0. 46	·0931	4. 20	·02829	9. 0	48 ·5	48 ·8
0. 56	37. 30	0. 50	·0928	7. 52	·02800	22. 15	42 ·5	43 ·8
1. 3	36. 25	0. 59	·0932	12. 25	·02886			
1. 7	38. 10	1. 2	·0929	14. 56	·03037			
1. 28	33. 20	1. 11	·0934	22. 54	·02997			
1. 42	35. 0 ***	1. 31	·0909	23. 59	·03020			
2. 31	31. 10	2. 11	·0901					
3. 45	37. 45	2. 44	·0906					
3. 50	35. 20	3. 0	·0919					
4. 4	35. 25	3. 13	·0903					
4. 13	32. 30	3. 49	·0893					
4. 25	33. 0	4. 13	·0864					
4. 47	30. 30	4. 27	·0870					
5. 15	34. 0	4. 53	·0879					
5. 29	29. 20	5. 10	·0876					
5. 43	29. 35	5. 16	·0871					
5. 58	33. 35	5. 30	·0878					
6. 16	27. 25	5. 44	·0879					
		5. 51	·0884					
		6. 7	·0866					
Jan. 15		Jan. 15						
h m	° ′ ″	h m		h m		h m	°	°
6. 22	21. 29. 30 ***	6. 18	·0877					
6. 42	29. 0 ***	6. 29	·0873 ***					
7. 13	17. 50 ***	7. 14	·0883					
7. 38	24. 10 ***	7. 30	·0898					
8. 20	16. 55	7. 43	·0889					
8. 32	19. 50	7. 47	·0891					
8. 50	17. 10 ***	8. 11	·0883					
9. 40	18. 15	8. 28	·0888					
10. 0	17. 0	9. 7	·0877					
10. 16	18. 5 ***	9. 31	·0883					
10. 52	12. 10	9. 45	·0881					
11. 58	20. 0	10. 40	·0891					
12. 26	15. 25	10. 59	·0885					
12. 44	17. 55	11. 32	·0883					
13. 10	14. 20	11. 57	·0893					
13. 30	17. 35	12. 30	·0887					
13. 42	13. 25	12. 44	·0887					
14. 28	25. 40	12. 59	·0895					
15. 11	14. 20 ***	13. 11	·0888					
16. 26	30. 35	13. 46	·0911					
16. 38	29. 40	14. 10	·0899					
16. 45	30. 50	14. 40	·0919					
17. 30	29. 15	15. 13	·0911					
17. 45	30. 0 ***	16. 6	·0907					
18. 27	29. 30	16. 28	·0909					
18. 42	29. 20	17. 0	·0916					
19. 0	31. 30 ***	17. 43	·0909					
20. 40	33. 30 ***	18. 28	·0911					
21. 57	31. 0	19. 13	·0910					
22. 26	33. 30 ***	19. 41	·0899					
23. 59	34. 0	20. 13	·0905					
		20. 30	·0902					
		20. 47	·0904					
		21. 1	·0903					
		21. 15	·0906					
		21. 31	·0902					
		22. 0	·0905					
		23. 28	·0891					
		23. 59	·0892					
Jan. 16		Jan. 16		Jan. 16		Jan. 16		
0. 0	21. 34. 0 ***	0. 0	·0892 ***	0. 0	·03020	9. 15	43 ·5	44 ·5
0. 45	35. 0 ***	1. 52	·0902	2. 42	·03051	21. 0	43 ·0	44 ·0
2. 35	30. 50	2. 13	·0907	5. 53	·02980			
4. 20	28. 50	2. 33	·0903	6. 30	·03019			
5. 42	28. 20	4. 23	·0909	7. 46	·02951			
6. 16	18. 35	4. 43	·0914	11. 20	·02946			
6. 36	23. 45 ***	4. 52	·0911	12. 53	·02981			
8. 0	20. 20 ***	5. 9	·0914	13. 20	·02950			
8. 38	21. 25 ***	5. 15	·0910	14. 47	·03007			
		5. 30	·0912	16. 40	{ ·02952 ·02861			
		6. 11	·0871	18. 38	·02752			
		6. 51	·0904	21. 25	·02533			
		7. 20	·0907 ***	23. 59	·02610			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
Jan. 16	
h m	° ′ ″
9. 15	21. 19. 40
9. 45	22. 15
10. 28	23. 30
10. 42	24. 35
12. 15	25. 30
12. 30	26. 55
12. 41	26. 50
12. 50	31. 10
13. 27	21. 50
13. 46	19. 0
14. 26	17. 30
14. 55	26. 20
	***
15. 30	26. 30
15. 46	23. 30
16. 5	23. 50
16. 26	22. 0
16. 45	25. 0
18. 10	27. 5
18. 15	28. 45
18. 30	27. 0
	***
21. 47	26. 10
	***
23. 30	29. 55
23. 37	28. 30
23. 59	29. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Jan. 16	
h m	
8. 1	·0894
8. 13	·0899
8. 48	·0905
9. 8	·0898
9. 40	·0909
10. 27	·0916
10. 36	·0920
10. 48	·0916
12. 2	·0915
12. 31	·0921
12. 52	·0945
13. 15	·0927
13. 45	·0929
14. 13	·0921
14. 22	·0922
14. 33	·0917
15. 15	·0923
15. 17	·0921
16. 6	·0936
16. 30	·0927
	***
18. 39	·0931
19. 13	·0923
20. 1	·0926
22. 30	·0910
22. 51	·0911
23. 59	·0894

Greenwich Mean Solar Time.	Western Declination.
Jan. 17	
0. 0	21. 29. 0
	***
1. 0	32. 55
	***
2. 10	31. 50
	***
3. 32	31. 30
	***
4. 28	29. 30
	***
7. 25	26. 20
	***
10. 4	25. 30
10. 17	26. 10
10. 38	22. 0
	***
11. 17	28. 5
12. 14	23. 20
	***
14. 0	28. 0
14. 31	26. 35
14. 46	27. 25
	***
17. 42	27. 55
18. 3	25. 30
	***
20. 5	25. 55
	***

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Jan. 17	
0. 0	·0894
0. 58	·0896
1. 46	·0891
2. 0	·0894
2. 12	·0891
2. 16	·0898
2. 30	·0897
	***
4. 6	·0901
4. 14	·0899
4. 39	·0907
4. 54	·0901
*6. 41	·0909
7. 11	·0913
	***
9. 56	·0911
10. 45	·0907
	***
11. 44	·0921
12. 31	·0914
	***
14. 36	·0922
14. 53	·0917
	***
15. 39	·0921
	***
16. 16	·0916
	***

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Jan. 17	
0. 0	·02610
3. 0	·02778
4. 45	·02837
7. 3	·02789
10. 5	·02771
21. 54	·02791
23. 59	·02878

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Jan. 17		
1. 0	48 ·3	49 ·0
3. 0	51 ·0	52 ·0
9. 0	52 ·0	53 ·0
21. 0	52 ·0	52 ·5

Greenwich Mean Solar Time.	Western Declination.
Jan. 17	
h m	° ′ ″
22. 5	21. 28. 5
	***
23. 0	31. 20
	***
23. 28	29. 25
23. 53	32. 0
23. 59	31. 10

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Jan. 17	
h m	
17. 22	·0917
18. 5	·0921
	***
21. 33	·0911
	***
22. 0	·0903
	***
22. 38	·0899
22. 57	·0904
23. 10	·0895
23. 53	·0897
23. 59	·0892

Greenwich Mean Solar Time.	Western Declination.
Jan. 18	
0. 0	21. 31. 10
0. 15	33. 15
	***
0. 43	33. 35
	***
1. 0	31. 0
	***
2. 5	29. 20
2. 17	32. 55
2. 33	36. 0
3. 13	31. 30
6. 53	24. 45
7. 30	26. 10
7. 50	25. 10
	***
11. 15	25. 0
11. 52	26. 45
	***
13. 54	26. 15
14. 27	24. 5
	***
15. 43	26. 35
	***
16. 45	24. 20
	***
21. 48	26. 40
	***
23. 59	32. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Jan. 18	
0. 0	·0892
0. 11	·0896
0. 29	·0894
0. 57	·0881
1. 40	·0886
2. 5	·0878
2. 35	·0888
2. 45	·0882
3. 14	·0881
5. 0	·0895
5. 14	·0894
5. 51	·0900
	***
6. 48	·0898
7. 26	·0904
7. 41	·0902
7. 53	·0905
8. 11	·0901
	***
11. 7	·0903
	***
12. 44	·0909
12. 54	·0907
13. 55	·0907
14. 13	·0910
14. 30	·0906
15. 40	·0907
15. 52	·0904
16. 25	·0908
18. 9	·0909
18. 29	·0911
	***
19. 11	·0907
19. 51	·0908
	***
21. 12	·0900
22. 29	·0898
22. 41	·0892
22. 58	·0896
	***
23. 59	·0890

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Jan. 18	
0. 0	·02878
2. 32	·02970
11. 22	·02886
16. 3	·02962
21. 54	·03286
23. 59	·03223

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m		
Jan. 18		
1. 0	55 ·0	55 ·0
3. 0	57 ·5	58 ·0
9. 0	57 ·0	56 ·0
21. 0	53 ·0	53 ·5

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Jan. 19	
h m	° ′ ″
0. 0	21. 32. 0
	***
0. 30	33. 0
	***
1. 15	28. 10
	***
1. 28	31. 45
1. 47	28. 30
1. 58	32. 5
2. 14	30. 15
2. 25	32. 0
2. 32	30. 10
2. 43	32. 0
2. 50	30. 50
3. 10	33. 20
3. 18	30. 10
	***
3. 53	28. 30
4. 12	29. 20
6. 26	26. 50
7. 4	28. 30
7. 50	26. 20
	***
9. 32	27. 10
9. 37	25. 0
	***
10. 10	24. 50
10. 30	27. 30
11. 4	27. 0
11. 40	28. 0
12. 17	25. 50
12. 38	26. 40
12. 50	25. 55
13. 22	27. 30
14. 40	23. 25
15. 10	33. 45
15. 17	34. 40
16. 8	22. 0
16. 17	25. 20
	***
18. 26	27. 15
	***
20. 17	25. 10
	***
23. 59	29. 50

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Jan. 19	
h m	
0. 0	·0890
	***
0. 48	·0881
	***
1. 30	·0894
1. 42	·0891
1. 52	·0897
	***
2. 51	·0883
2. 59	·0888
3. 23	·0881
4. 0	·0894
4. 27	·0895
5. 22	·0903
5. 31	·0899
5. 58	·0901
6. 53	·0905
	***
8. 29	·0897
8. 50	·0898
9. 11	·0907
9. 29	·0919
9. 44	·0921
10. 0	·0911
10. 16	·0918
10. 54	·0912
	***
12. 15	·0921
12. 29	·0918
12. 44	·0921
12. 59	·0917
14. 36	·0923
14. 46	·0919
15. 0	·0921
15. 10	·0918
15. 39	·0931
15. 56	·0924
16. 11	·0925
16. 18	·0919
16. 44	·0925
	***
20. 40	·0925
	***
21. 30	·0917
22. 28	·0913
22. 58	·0908
23. 37	·0914
23. 59	·0912

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Jan. 19	
h m	
0. 0	·03223
1. 32	{ ·03122 ·03229
3. 42	·03200
8. 9	·03330
8. 54	·03378
10. 22	·03304
15. 17	·03209
16. 15	·03140
22. 27	·03119
23. 59	·02983

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 19		
h m	°	°
1. 0	56 ·0	56 ·0
3. 0	57 ·5	58 ·0
9. 0	55 ·9	55 ·7
21. 0	46 ·0	47 ·0

Greenwich Mean Solar Time.	Western Declination.
Jan. 20	
0. 0	21. 29. 50
	***
0. 57	30. 5
1. 14	29. 20
1. 45	29. 0
2. 42	27. 15
3. 40	26. 25
Jan. 20	
h m	° ′ ″
4. 19	21. 27. 30
	***
8. 4	24. 50
8. 33	22. 25
8. 51	24. 0
12. 3	26. 30
13. 13	22. 10
13. 29	23. 55
13. 48	22. 10
14. 15	27. 0
14. 43	23. 50
15. 32	25. 25
	***
21. 13	26. 5
	***
23. 20	28. 50
	***
23. 59	31. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Jan. 20	
0. 0	·0912
1. 6	·0909
1. 23	·0910
2. 11	·0904
	***
3. 24	·0897
4. 0	·0903
Jan. 20	
h m	
4. 36	·0902
	***
5. 22	·0907
5. 42	·0906
5. 57	·0909
6. 45	·0909
6. 56	·0913
	***
7. 45	·0912
	***
8. 59	·0920
	***
12. 43	·0919
12. 58	·0928
13. 27	·0927
13. 58	·0920
14. 16	·0924
14. 27	·0922
14. 45	·0923
15. 0	·0920
	***
20. 19	·0929
	***
21. 41	·0917
21. 57	·0920
22. 6	·0915
23. 15	·0907
23. 59	·0890

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Jan. 20	
0. 0	·02983
1. 26	·02783
3. 20	·02837
5. 21	·02802
6. 52	·02771
14. 30	·03033
17. 53	·03204
Jan. 20	
h m	
23. 59	·03170

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 20		
1. 0	50 ·0	51 ·0
3. 0	53 ·0	53 ·0
9. 0	53 ·3	53 ·0
21. 0	49 ·0	50 ·0

Greenwich Mean Solar Time.	Western Declination.
Jan. 21	
0. 0	21. 31. 30
	***
0. 45	30. 50
0. 56	29. 30
1. 44	31. 30
2. 30	29. 0
	***
6. 7	26. 20
7. 58	23. 55
10. 15	24. 30
10. 43	18. 0
11. 4	24. 55
11. 30;	23. 0
11. 47	24. 50
	***
13. 5	25. 40
16. 45	26. 35
17. 0	26. 0
17. 36	27. 0
17. 57	25. 45
19. 15	28. 50
19. 34	28. 5
20. 7	31. 20
	***
20. 48	28. 10
	***
23. 59	28. 20

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Jan. 21	
0. 0	·0890
0. 28	·0901
	***
1. 29	·0905
2. 28	·0891
3. 20	·0897
3. 41	·0895
4. 46	·0897
6. 28	·0909
7. 52	·0912
10. 9	·0909
10. 32	·0919
10. 53	·0913
11. 15	·0919
11. 52	·0916
	***
17. 0	·0925
19. 6	·0917
19. 43	·0925
	***
21. 30	·0909
	***
23. 46	·0900
	(†)

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Jan. 21	
0. 0	·03170
1. 50	·03096
4. 53	·02812
10. 15	·02770
21. 25	·02743
23. 59	·02827

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
	°	°
h m		
Jan. 21		
1. 0	51 ·0	51 ·0
3. 0	53 ·5	54 ·0
9. 0	53 ·5	53 ·0
21. 0	52 ·0	53 ·0

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Greenwich Mean Solar Time.	Western Declination.
Jan. 22	
h m	° ′ ″
0. 0	21. 28. 20
1. 8	28. 20
3. 5	26. 0
4. 50	27. 0
10. 15	25. 5
16. 58	26. 30
19. 43	25. 20
23. 59	30. 50
Jan. 23	
0. 0	21. 30. 50
0. 50	30. 30
1. 13	31. 35
1. 50	29. 30
2. 11	29. 30
3. 12	26. 45
3. 54	27. 50
4. 25	27. 0
5. 16	28. 30
7. 30	25. 40
16. 13	27. 50
20. 37	26. 15
23. 59	30. 50
Jan. 24	
0. 0	21. 30. 50
1. 28	29. 25
3. 10	26. 20
4. 17	27. 25
8. 20	25. 30
16. 0	26. 30
19. 27	25. 40
22. 43	29. 20
	***
23. 40	31. 0
23. 59	30. 30
Jan. 25	
0. 0	21. 30. 30
0. 58	30. 55
1. 45	30. 0
1. 56	30. 25
2. 40	28. 0
3. 27	26. 50
3. 56	26. 15
4. 45	27. 0
6. 53	26. 20
8. 47	25. 45
14. 57	26. 0
20. 0	24. 50
Jan. 25	
h m	′ ″
21. 45	21. 26. 25
	***
23. 59	29. 30
Jan. 26	
0. 0	21. 29. 30
0. 45	29. 30
3. 34	25. 50
5. 8	27. 15
5. 37	26. 50
7. 3	28. 30
7. 14	27. 20
7. 45	21. 40
8. 4	22. 35
8. 12	21. 45
9. 0	24. 40
13. 20	26. 0
13. 32	29. 35
	***
14. 15	22. 10
	***
14. 46	25. 10
	***
15. 38	18. 50
16. 5	18. 0
16. 32	24. 5
17. 30	23. 55
17. 53	22. 55
18. 40	26. 20
19. 24	23. 0
	***
20. 56	32. 50
	***
21. 45	29. 45
	***
22. 18	33. 35
	***
23. 15	33. 20
23. 28	32. 0
23. 36	33. 50
23. 45	33. 0
23. 50	36. 40
23. 59	35. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Jan. 22	
h m	(†)
1. 0	·0898*
2. 45	·0900
7. 54	·0915
11. 27	·0920
14. 26	·0928
18. 46	·0933
22. 25	·0920
23. 59	·0926
Jan. 23	
0. 0	·0926
2. 46	·0938
3. 13	·0932
3. 45	·0935
4. 14	·0933
4. 30	·0936
5. 12	·0933
5. 44	·0939
11. 0	·0937
18. 10	·0950
20. 0	·0945
22. 45	·0921
23. 48	·0916
23. 59	·0919
Jan. 24	
0. 0	·0919
0. 17	·0913
	***
2. 21	·0917
2. 27	·0915
4. 12	·0913
6. 43	·0917
	***
8. 57	·0917
9. 10	·0921
13. 28	·0920
15. 12	·0923
21. 16	·0917
22. 43	·0898
23. 59	·0898
Jan. 25	
0. 0	·0898
1. 39	·0905
1. 55	·0901
2. 40	·0904
4. 25	·0902
6. 33	·0907
11. 44	·0911
18. 14	·0917
18. 22	·0915
19. 52	·0912
20. 11	·0913
21. 7	·0910
Jan. 25	
h m	
22. 13	·0900
23. 59	·0904
Jan. 26	
0. 0	·0904
	***
2. 48	·0902
4. 13	·0907
	***
5. 27	·0905
6. 5	·0912
6. 52	·0913
7. 36	·0895
7. 45	·0897
7. 56	·0896
8. 13	·0901
8. 30	·0895
8. 57	·0897
9. 55	·0911
	***
12. 48	·0916
13. 22	·0922
13. 28	·0942
13. 36	·0937
	***
14. 7	·0935
14. 27	·0926
	***
15. 0	·0921
	***
15. 19	·0927
15. 43	·0921
15. 46	·0924
16. 9	·0914
16. 30	·0913
18. 30	·0923
18. 53	·0919
19. 15	·0923
19. 48	·0918
	***
20. 30	·0905
	***
21. 8	·0915
21. 43	·0909
21. 57	·0909
22. 0	·0917
22. 6	·0913
22. 14	·0918
22. 21	·0909
22. 30	·0911
22. 36	·0907
22. 46	·0908
23. 0	·0900
23. 17	·0897
23. 28	·0901
23. 40	·0898
23. 59	·0902

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Jan. 22	
h m	
0. 0	·02827
1. 45	·02832
3. 16	·02893
4. 36	·02905
5. 27	·02932
7. 26	·03142
9. 15	·03306
13. 40	·03183
20. 38	·03120
23. 59	·02979
Jan. 23	
0. 0	·02979
1. 57	·02834
2. 47	·02800
5. 33	·02600
9. 20	·02629
12. 30	·02621
15. 45	·02768
20. 48	{ ·03062 ·02973
22. 15	·03031
23. 59	·02970
Jan. 24	
0. 0	·02970
2. 5	·02693
4. 45	·02742
6. 47	·02719
21. 56	·02708
23. 59	·02791
Jan. 25	
0. 0	·02791
2. 13	·02883
5. 4	·02884
11. 57	·03042
17. 26	·03047
19. 15	·03127
20. 40	·03258
23. 59	·03249
h m	
Jan. 26	
0. 0	·03249
1. 34	·03221
2. 56	{ ·03107 ·03225
5. 33	·03200
8. 0	·03297
14. 20	·03178
19. 4	·03196
22. 10	·03177
23. 59	·03095

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 22		
h m	°	°
1. 0	54·0	54·0
3. 0	56·0	55·5
9. 0	55·0	55·0
22. 33	45·7	47·0
Jan. 23		
6. 36	47·0	48·0
21. 0	44·0	45·0
Jan. 24		
1. 0	47·0	48·0
3. 0	50·0	50·8
9. 0	51·0	50·5
21. 0	50·0	51·0
Jan. 25		
1. 0	54·5	55·0
3. 0	55·8	56·0
9. 0	55·0	54·0
21. 0	50·0	51·0
h m	°	°
Jan. 26		
1. 0	51·7	51·5
3. 0	54·0	55·0
9. 0	52·5	52·0
21. 0	48·5	49·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 27		Jan. 27		Jan. 27		Jan. 27		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 35. 30	0. 0	·0902	0. 0	·03095	1. 0	51·0	52·0
0. 22	34. 0		***	2. 22	·02820	3. 0	54·0	55·0
	***	0. 43	·0901	4. 36	·02877	9. 0	54·0	54·0
2. 11	34. 50		***	6. 10	·02839	21. 0	49·2	50·8
3. 15	29. 40	1. 52	·0918	6. 16	·02918			
4. 17	26. 55		***	12. 15	·03070			
4. 30	28. 0	2. 30	·0908	16. 9	·03271			
5. 56	29. 15		***	19. 56	·03238			
7. 7	24. 35	3. 6	·0905	22. 40	·03266			
8. 12	25. 45	3. 29	·0909	23. 59	·03197			
10. 14	23. 30	3. 45	·0905					
10. 30	26. 0	3. 58	·0909					
11. 4	24. 0	4. 14	·0906					
11. 26	27. 30	4. 30	·0911					
11. 50	24. 20	5. 22	·0907					
12. 13	26. 0		***					
12. 34	23. 50	6. 26	·0904					
12. 56	26. 30	6. 34	·0909					
13. 7	24. 30	6. 50	·0905					
13. 38	23. 10	7. 30	·0914					
14. 0	24. 40		***					
	***	9. 31	·0916					
14. 43	20. 25	9. 44	·0921					
14. 54	22. 10	10. 1	·0917					
15. 14	20. 20	11. 0	·0919					
	***	11. 13	·0923					
15. 56	20. 30	11. 30	·0916					
16. 15	23. 30	11. 50	·0920					
17. 4	21. 50	12. 22	·0913					
17. 43	22. 30	12. 45	·0918					
18. 42	27. 25	12. 54	·0912					
	***	13. 13	·0915					
21. 2	26. 25	13. 35	·0910					
	***	13. 53	·0918					
23. 59	32. 0	14. 28	·0914					
		14. 45	·0923					
		16. 6	·0920					
		16. 54	·0927					
		18. 10	·0933					
			***					
		19. 41	·0919					
		20. 30	·0904					
			***					
		21. 44	·0897					
		21. 55	·0890					
			***					
		23. 59	·0886					
Jan. 28		Jan. 28		Jan. 28		Jan. 28		
0. 0	21. 32. 0	0. 0	·0886	0. 0	·03197	1. 0	52·5	53·0
0. 7	30. 30	0. 13	·0892	2. 51	·02852	3. 0	55·0	56·2
0. 13	33. 0	0. 18	·0887	4. 5	{ ·02903	9. 0	55·0	56·0
0. 20	32. 0	0. 45	·0895		·02982	21. 0	57·8	59·0
	***	0. 58	·0892	6. 27	·02990			
1. 40	31. 20	1. 37	·0898	12. 21	·03301			
2. 8	32. 35	1. 56	·0907	21. 36	·03188			
	***	2. 11	·0902	23. 11	·03167			
2. 48	29. 20		***		(†)			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 28		Jan. 28						
h m	° ′ ″	h m		h m		h m	°	°
4. 13	21. 26. 50	3. 15	·0906					
7. 5	27. 15	4. 0	·0912					
7. 58	24. 25	4. 13	·0908					
10. 52	24. 0		***					
11. 3	26. 5	5. 22	·0909					
11. 16	23. 30	5. 40	·0907					
11. 40	22. 25	6. 9	·0909					
	***	6. 15	·0906					
13. 13	26. 10	6. 25	·0911					
	***	6. 37	·0910					
15. 15	25. 45	6. 48	·0913					
15. 26	26. 50	6. 55	·0910					
16. 10	24. 40	7. 11	·0913					
	***	7. 35	·0901					
19. 43	24. 10	8. 4	·0908					
20. 45	23. 0	8. 26	·0900					
	***	8. 51	·0909					
22. 41	28. 0	9. 15	·0908					
23. 59	30. 30	9. 28	·0911					
		10. 20	·0909					
		10. 51	·0911					
		11. 0	·0919					
		11. 15	·0912					
			***					
		15. 45	·0913					
		16. 9	·0917					
		18. 34	·0918					
		18. 54	·0921					
		20. 16	·0919					
		21. 52	·0901					
		22. 0	·0904					
		22. 22	·0901					
		22. 44	·0905					
		23. 30	·0894					
		23. 59	·0897					
Jan. 29		Jan. 29		Jan. 29		Jan. 29		
0. 0	21. 30. 30	0. 0	·0897		(†)	1. 0	50·5	51·0
	***	0. 17	·0892	0. 15	·03082	3. 0	52·5	53·8
0. 57	32. 0	0. 43	·0895	2. 45	·02906	9. 0	53·0	53·5
	***	0. 53	·0901	5. 15	·02712	22. 35	49·0	51·0
2. 30	29. 15		***	12. 3	·02728			
4. 48	26. 15	2. 11	·0909	16. 37	·02717			
5. 21	26. 55	2. 27	·0909	19. 9	·02803			
	***	2. 31	·0905	23. 59	·03011			
6. 26	24. 30	4. 9	·0912					
6. 47	26. 35	5. 43	·0910					
7. 8	25. 45	5. 51	·0907					
	***	5. 58	·0912					
13. 10	26. 30	6. 12	·0910					
14. 16	25. 20	6. 29	·0917					
14. 40	26. 10	6. 48	·0913					
	***	7. 15	·0918					
20. 15	22. 40	8. 31	·0919					
20. 56	23. 5	9. 12	·0916					
	***		***					
23. 59	30. 45	14. 9	·0913					
		14. 29	·0916					
			***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Jan. 29						
h m	° ′ ″	h m		h m		h m	°	°
		17. 27	·0921					
		20. 15	·0919					
		20. 52	·0913					
		23. 26	·0905					
		23. 36	·0911					
		23. 59	·0910					
Jan. 30		Jan. 30		Jan. 30		Jan. 30		
0. 0	21. 30. 45	0. 0	·0910	0. 0	·03011	7. 50	48·0	49·4
0. 17	33. 0	0. 13	·0897	5. 37	·03046	21. 0	43·0	44·0
1. 4	34. 10	0. 59	·0916	8. 30	·03153			
	***		***	9. 27	·03200			
3. 57	27. 50	2. 10	·0920	12. 2	·03152			
4. 50	28. 20	2. 19	·0926		·03044			
5. 43	27. 25		***	13. 20	·03140			
6. 56	28. 0	4. 14	·0927	21. 50	·03051			
8. 7	26. 30		***		(†)			
8. 30	29. 0	4. 47	·0933					
8. 48	24. 0		***					
9. 30	27. 25	5. 14	·0929					
	***	5. 36	·0935					
15. 18	25. 30		***					
	***	6. 44	·0937					
17. 3	26. 5	6. 53	·0934					
	***		***					
20. 0	24. 0	8. 18	·0935					
	***	8. 38	·0929					
21. 45	26. 10		***					
	***	9. 15	·0933					
23. 4	31. 20		***					
23. 45	31. 0	9. 37	·0923					
23. 59	30. 20	9. 49	·0930					
		10. 10	·0920					
			***					
		11. 56	·0924					
		12. 13	·0930					
			***					
		12. 53	·0926					
		13. 17	·0936					
		13. 58	·0930					
			***					
		16. 16	·0929					
		17. 54	·0935					
		18. 15	·0934					
		20. 32	·0942					
		20. 53	·0937					
		21. 6	·0941					
			***					
		22. 52	·0913					
		23. 59	·0913					
Jan. 31		Jan. 31				Jan. 31		
0. 0	21. 30. 20	0. 0	·0913			1. 0	46·8	
	***		***			3. 0	49·0	
1. 45	30. 50	4. 11	·0911			9. 0	49·3	
3. 32	26. 30	6. 12	·0913			21. 0	43·3	
9. 16	25. 0	6. 22	·0921					
13. 0	26. 25	6. 40	·0915					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 31		Jan. 31						
h m	° ′ ″	h m		h m		h m		°
16. 43	21. 25. 30	6. 45	·0914					
18. 45	25. 25	6. 51	·0916					
20. 53	22. 30	7. 45	·0923					
23. 59	29. 15	9. 40	·0923					
		9. 45	·0929					
			***					
		11. 0	·0925					
			***					
		20. 0	·0919					
		21. 40	·0911					
			***					
		23. 59	·0905					
Feb. 1		Feb. 1				Feb. 1		
0. 0	21. 29. 15	0. 0	·0905			1. 0	47·2	
	***	0. 43	·0903			3. 0	50·7	
1. 43	30. 50	1. 51	·0904			9. 0	49·2	
3. 52	28. 30	2. 12	·0907			21. 0	47·0	
	***	2. 33	·0903					
7. 50	28. 30	2. 58	·0907					
8. 33	25. 25		***					
8. 56	17. 10	5. 45	·0909					
9. 7	16. 55	6. 46	·0912					
9. 17	21. 20	7. 15	·0918					
9. 54	22. 55	7. 54	·0912					
10. 30	21. 25	8. 25	·0912					
11. 8	23. 15	8. 40	·0906					
	***	9. 3	·0919					
11. 33	23. 10	9. 28	·0909					
	(†)	9. 36	·0908					
11. 57	29. 15	9. 52	·0911					
	***	10. 22	·0904					
13. 3	21. 35	10. 36	·0907					
	***	11. 21	·0908					
13. 42	22. 20	11. 58	·0927					
	***	12. 15	·0919					
14. 12	21. 0	12. 51:	·0925					
14. 30	23. 20	13. 55	·0914					
	***	14. 30	·0923					
16. 55	24. 0	14. 42	·0921					
17. 20	22. 35	16. 46	·0924					
	***	17. 5	·0927					
18. 12	23. 30	17. 55	·0922					
18. 38	22. 50	18. 44	·0926					
19. 4	25. 10		***					
	***	20. 24	·0918					
21. 5	25. 25	20. 31	·0921					
	***	20. 44	·0917					
22. 26	29. 20		***					
	***	22. 19	·0913					
23. 59	30. 0	22. 36	·0908					
		23. 0	·0909					
		23. 37	·0906					
		23. 59	·0899					
Feb. 2		Feb. 2				Feb. 2		
0. 0	21. 30. 0	0. 0	·0899			1. 0	50·2	
2. 2	31. 5	0. 46:	·0895			3. 0	52·0	

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Vertical Force. From January 31 to April 19 the Vertical Force Magnet was in the hands of Mr. Simms.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 2		Feb. 2				Feb. 2		
h m	° ′ ″	h m		h m		h m	°	°
3. 47	21. 26. 20	2. 42	·0903			9. 0	51 ·0	
7. 38	26. 0	3. 22	·0903			21. 0	45 ·0	
8. 27	23. 10	4. 30	·0910					
	***	5. 40	·0908					
8. 56	25. 10	7. 11	·0913					
10. 8	25. 0	7. 56	·0909					
11. 2	23. 40	8. 12	·0910					
12. 30	25. 50	8. 23	·0914					
15. 26	27. 0	9. 42	·0911					
	***	10. 40	·0915					
20. 38	23. 50	11. 11	·0913					
	***		***					
21. 27	24. 0	13. 41	·0923					
	***	18. 4	·0927					
23. 59	30. 15		***					
		19. 0	·0932					
		21. 52	·0916					
		22. 28	·0918					
		23. 5	·0909					
		23. 15	·0905					
		23. 59	·0907					
Feb. 3		Feb. 3				Feb. 3		
0. 0	21. 30. 15	0. 0	·0907			1. 0	47 ·5	
	***	0. 8	·0909			3. 0	50 ·0	
1. 20	31. 35	0. 30	·0906			9. 0	49 ·0	
1. 34	30. 0	1. 51	·0912			21. 0	41 ·0	
2. 7	30. 0	2. 23	·0911					
2. 45	27. 50	3. 11	·0914					
5. 33	26. 15	4. 24	·0912					
9. 5	26. 5	8. 15	·0925					
9. 17	24. 0	9. 0	·0923					
9. 30	25. 0	9. 16	·0916					
9. 56	22. 5	9. 52	·0914					
10. 32	24. 10	10. 14	·0921					
	***	10. 30	·0920					
11. 13	23. 45		***					
	***	13. 12	·0935					
11. 57	26. 0	15. 13	·0934					
12. 28	25. 35	18. 3	·0940					
12. 40	26. 20	20. 14	·0937					
13. 0	25. 20	22. 11	·0923					
13. 17	27. 0	22. 48	·0917					
13. 42	26. 30	23. 43	·0915					
13. 46	25. 0	23. 59	·0912					
14. 53	25. 50							
15. 4	25. 30							
15. 32	26. 40							
21. 23	24. 5							
22. 15	26. 45							
22. 56	28. 10							
23. 59	31. 20							
Feb. 4		Feb. 4				Feb. 4		
0. 0	21. 31. 20	0. 0	·0912			1. 0	44 ·9	
0. 26	31. 55	0. 44	·0905			3. 0	48 ·0	
0. 45	30. 0	1. 55	·0920			9. 8	49 ·0	
1. 47	33. 35	2. 15	·0919			21. 0	47 ·0	

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 4		Feb. 4						
h m	° ′ ″	h m		h m		h m	°	°
2. 16	21. 33. 0	2. 30	·0914					
2. 33	30. 5		***					
2. 48	31. 20	3. 40	·0921					
4. 3	30. 10	4. 22	·0916					
5. 18	27. 55	5. 0	·0915					
6. 13	27. 55	5. 27	·0918					
6. 43	27. 10	5. 49	·0914					
7. 15	27. 50	7. 12	·0920					
8. 0	26. 0	7. 30	·0917					
8. 17	27. 0	8. 12	·0921					
8. 48	14. 0	8. 40	·0907					
9. 4	19. 25	9. 15	·0926					
9. 26	21. 20	9. 28	·0926					
9. 46	20. 20	10. 0	·0919					
10. 50	23. 0	10. 27	·0923					
11. 43	23. 0		***					
12. 44	26. 35	12. 0	·0922					
13. 0	24. 0	12. 45	·0929					
13. 18	25. 15	12. 58	·0927					
13. 33	23. 50	13. 12	·0930					
14. 7	25. 0	13. 21	·0925					
14. 32	24. 10	13. 45	·0928					
15. 3	26. 0	14. 54	·0927					
15. 17	29. 25	16. 7	·0938					
15. 42	30. 0	16. 45	·0931					
16. 26	22. 45	18. 14	·0935					
	***	20. 11	·0930					
19. 7	25. 5	22. 38	·0909					
20. 53	24. 10	23. 12	·0900					
21. 50	25. 30		(†)					
22. 33	29. 15							
23. 37	30. 50							
23. 59	29. 45							
Feb. 5		F .5				Feb. 5		
0. 0	21. 29. 45		(†)			1. 0	50 ·3	
	***	1. 3	·0897			3. 0	53 ·	
0. 46	29. 50	1. 32	·0903			9. 0	54 ·5	
2. 20	31. 20	1. 57	·0807			22. 0	46 ·0	
3. 42	29. 55	2. 56	·0897					
	***	3. 13	·0898					
4. 47	26. 20	3. 21	·0894					
5. 32	27. 35	4. 0	·0894					
8. 53	24. 55	4. 15	·0896					
13. 8	23. 15	4. 31	·0895					
	(†)	5. 21	·0901					
14. 17	24. 30	6. 10	·0902					
16. 28	26. 0	6. 28	·0906					
17. 12	26. 45	12. 52	·0917					
18. 6	25. 5	13. 11	·0921					
18. 34	26. 10		***					
20. 54	23. 20	14. 22	·0917					
	***		***					
22. 17	26. 25	19. 18	·0933					
	***	22. 46	·0909					
23. 59	32. 40		***					
		23. 59	·0913					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 6		Feb. 6				Feb. 6		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 32. 40	0. 0	·0913			9. 0	47 ·5	
0. 11	31. 50	2. 0	·0920			21. 0	42 ·6	
0. 18	33. 10	4. 25	·0919					
	***	4. 53	·0923					
4. 12	30. 0	7. 7	·0926					
4. 33	29. 0	7. 30	·0931					
5. 42	28. 50	7. 53	·0925					
	***	9. 20	·0931					
6. 47	27. 0	9. 38	·0928					
7. 28	23. 20		***					
7. 54	27. 25	11. 0	·0931					
	***	11. 23	·0933					
9. 45	25. 30	12. 15	·0927					
9. 57	26. 15	12. 43	·0931					
12. 13	25. 0	13. 11	·0929					
	***	13. 26	·0935					
13. 13	25. 10	13. 57	·0927					
	***	14. 30	·0936					
13. 50	23. 0	15. 21	·0927					
	***	16. 43	·0933					
14. 28	24. 50	19. 36	·0933					
14. 45	23. 0	20. 0	·0931					
	***	21. 30	·0916					
18. 23	26. 45	21. 57	·0919					
21. 2	24. 35	23. 59	·0907					
	***							
23. 48	32. 0							
23. 59	31. 10							
Feb. 7		Feb. 7				Feb. 7		
0. 0	21. 31. 10	0. 0	·0907			1. 0	45 ·0	
	***	0. 26	·0912			3. 0	50 ·0	
1. 26	33. 50	0. 51	·0911			9. 0	49 ·5	
	***		***			21. 0	42 ·0	
2. 25	33. 15	2. 19	·0919					
2. 50	30. 50	2. 55	·0911					
4. 16	31. 10	3. 31	·0919					
4. 53	28. 55	4. 48	·0915					
9. 30	26. 15	5. 27	·0923					
	***	5. 48	·0921					
16. 28	27. 35	7. 45	·0924					
	***	10. 27	·0925					
18. 27	26. 50	12. 21	·0931					
	***	13. 28	·0931					
20. 29	24. 25		***					
	***	17. 0	·0943					
21. 41	24. 0	18. 43	·0945					
	***	20. 52	·0940					
23. 59	33. 45	21. 30	·0931					
		22. 30	·0928					
		22. 51	·0922					
		23. 59	·0919					
Feb. 8		Feb. 8				Feb. 8		
0. 0	21. 33. 45	0. 0	·0919			1. 0	44 ·8	
0. 20	33. 30	0. 13	·0916			3. 0	47 ·5	
	***	0. 54	·0919			9. 0	49 ·0	
1. 11	35. 10	1. 37	·0907			21. 0	46 ·8	

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 8		Feb. 8						
h m	° ′ ″	h m		h m		h m	°	°
1. 47	21. 32. 15	2. 0	·0917					
1. 55	33. 30	2. 57	·0915					
	***	3. 19	·0917					
3. 12	30. 50	3. 45	·0913					
	***		***					
4. 46	29. 5	5. 46	·0913					
5. 45	29. 0	6. 15	·0921					
7. 58	26. 55	6. 28	·0920					
10. 42	26. 25	6. 52	·0923					
	***		***					
17. 2	27. 20	8. 10	·0921					
17. 6	25. 30	8. 28	·0925					
17. 12	26. 30		***					
	***	12. 11	·0925					
20. 43	23. 40		***					
	***	19. 37	·0935					
21. 50	25. 10		***					
	***	23. 8	·0905					
23. 59	31. 55	23. 18	·0908					
		23. 59	·0902					
Feb. 9		Feb. 9				Feb. 9		
0. 0	21. 31. 55	0. 0	·0902			1. 0	50 ·0	
	***	0. 10	·0909			3. 0	51 ·3	
0. 26	32. 25	0. 29	·0911			9. 0	51 ·0	
0. 33	31. 40	0. 35	·0906			21. 0	50 ·0	
0. 50	34. 30	0. 51	·0912					
1. 4	33. 25	1. 51	·0902					
	***	2. 10	·0903					
2. 8	37. 0	2. 17	·0897					
	***		***					
2. 42	37. 0	3. 26	·0894					
2. 47	33. 25	3. 45	·0902					
3. 3	36. 35	3. 54	·0899					
3. 15	36. 30	4. 0	·0907					
3. 28	34. 50	4. 14	·0896					
	***	4. 26	·0897					
3. 59	37. 5		***					
4. 17	33. 20	4. 55	·0891					
4. 27	34. 45		***					
	***	5. 19	·0917					
4. 47	35. 30	5. 30	·0900					
4. 56	33. 30		***					
5. 0	34. 25	5. 50	·0911					
5. 7	33. 25	5. 56	·0898					
	***	6. 7	·0907					
5. 25	35. 0	6. 14	·0900					
5. 41	43. 50	6. 17	·0907					
5. 52	41. 15	6. 26	·0877					
5. 58	34. 45	6. 30	·0896					
	***	6. 42	·0865					
6. 25	43. 40	6. 58	·0886					
6. 47	7. 55		***					
7. 27	34. 35	7. 15	·0875					
8. 5	25. 40	7. 22	·0877					
8. 26	17. 10	7. 28	·0866					
8. 44	7. 0	7. 38	·0869					
8. 59	22. 0	7. 43	·0866					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 9		Feb. 9						
h m	° ′ ″	h m		h m		h m	°	°
9. 15	21. 13. 30	7. 58	·0873					
9. 32	8. 10	8. 11	·0867					
9. 47	20. 10	8. 43	·0895					
	***	8. 50	·0881					
10. 2	18. 30	9. 1	·0868					
	***	9. 15	·0881					
10. 30	24. 35	9. 35	·0897					
	***	9. 55	·0879					
11. 15	24. 45	10. 15	·0896					
11. 42	23. 5	10. 22	·0891					
11. 47	23. 40		***					
12. 0	21. 50	11. 44	·0893					
12. 18	24. 0	11. 53	·0887					
12. 30	31. 30	12. 12	·0894					
12. 42	26. 25	12. 16	·0889					
	***	12. 33	·0902					
13. 12	24. 50	12. 45	·0907					
13. 33	10. 10	13. 0	·0895					
	***	13. 11	·0905					
13. 54	13. 0	13. 23	·0901					
	***	13. 43	·0917					
14. 18	11. 45		***					
14. 45	23. 5	14. 15	·0885					
14. 53	20. 30	14. 31	·0893					
	***	14. 51	·0883					
15. 13	21. 0		***					
15. 33	30. 15	15. 10	·0895					
	***	15. 33	·0881					
15. 50	33. 25	16. 0	·0884					
16. 15	26. 50	16. 21	·0896					
	***	16. 38	·0885					
16. 34	27. 25		***					
16. 49	35. 0	17. 7	·0883					
16. 59	39. 0	17. 24	·0899					
	***	17. 45	·0905					
17. 14	38. 45	17. 57	·0897					
17. 27	35. 10	18. 30	·0918					
17. 45	31. 10		***					
17. 53	32. 40	19. 13	·0895					
18. 2	29. 0		***					
	***	20. 13	·0893					
19. 8	30. 0	20. 22	·0888					
	***	20. 34	·0892					
19. 38	31. 50		***					
19. 45	29. 40	21. 27	·0867					
19. 51	26. 25		***					
19. 58	28. 0	22. 51	·0874					
20. 13	25. 15	23. 6	·0865					
20. 19	27. 30	23. 30	·0866					
20. 32	26. 0	23. 59	·0873					
20. 40	28. 50							
20. 47	24. 10							
20. 59	26. 25							
	***							
22. 4	29. 0							
22. 18	26. 55							
	***							
23. 3	32. 0							
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 9								
h m	° ′ ″	h m		h m		h m	°	°
23. 34	21. 31. 10							
23. 59	34. 30							
Feb. 10		Feb. 10				Feb. 10		
0. 0	21. 34. 30	0. 0	·0873			1. 0	52 ·0	
0. 4	37. 15	0. 19	·0862			3. 0	53 ·5	
	***	0. 57	·0873			9. 0	53 ·2	
0. 23	35. 5		***			21. 0	47 ·2	
	***	2. 14	·0879					
1. 7	37. 50	2. 30	·0875					
1. 20	36. 10	2. 42	·0881					
	***		***					
2. 13	36. 30	3. 30	·0877					
2. 32	33. 50	3. 52	·0885					
2. 43	34. 50	4. 5	·0881					
	***	4. 41	·0887					
3. 25	33. 0	5. 26	·0893					
3. 37	31. 25	5. 43	·0871					
3. 50	31. 30	5. 53	·0873					
3. 57	32. 0	6. 6	·0871					
4. 15	29. 40	6. 43	·0905					
	***	7. 7	·0885					
5. 33	28. 0	7. 26	·0887					
5. 54	17. 30	7. 47	·0883					
	***	8. 11	·0883					
6. 30	11. 50	8. 38	·0889					
7. 12	27. 0	8. 49	·0923					
	***	9. 17	·0888					
8. 17	25. 0	9. 31	·0887					
8. 43	19. 50	10. 44	·0898					
8. 57	8. 0	11. 0	·0897					
9. 13	19. 0	11. 14	·0901					
9. 32	25. 50	11. 50	·0900					
9. 48	23. 30	13. 10	·0909					
	***	13. 43	·0906					
11. 17	27. 0	14. 23	·0911					
11. 38	25. 50	14. 53	·0919					
	***	15. 12	·0914					
14. 2	27. 20	15. 22	·0916					
14. 36	30. 10	16. 13	·0909					
14. 47	28. 30		***					
	***	18. 11	·0918					
16. 15	26. 55	18. 44	·0915					
	***	19. 12	·0918					
17. 45	27. 0	23. 28	·0880					
18. 3	26. 15	23. 59	·0877					
18. 24	27. 0							
	***							
21. 7	25. 35							
	***							
22. 5	27. 40							
22. 10	25. 35							
22. 45	27. 20							
23. 0	30. 45							
23. 17	32. 0							
23. 30	30. 30							
23. 40	32. 10							
23. 46	32. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 10								
h m	° ′ ″	h m		h m		h m	°	
23. 52	21. 33. 30							
23. 59	32. 55							
Feb. 11		Feb. 11				Feb. 11		
0. 0	21. 32. 55	0. 0	·0877			1. 0	51·0	
0. 30	31. 30	2. 11	·0891			3. 0	53·0	
0. 46	32. 25	2. 30	·0889			9. 0	53·0	
1. 8	31. 50	2. 57	·0877			21. 0	49·8	
1. 30	33. 30	3. 43	·0890					
	***	6. 42	·0899					
2. 0	31. 30	6. 47	·0897					
2. 17	33. 10	7. 13	·0899					
2. 29	31. 5	7. 42	·0887					
2. 40	32. 40	8. 13	·0900					
3. 26	28. 25		***					
4. 0	29. 45	15. 29	·0913					
4. 25	28. 20		***					
5. 58	26. 30	18. 36	·0915					
6. 50	26. 40	20. 5	·0907					
7. 15	25. 50	23. 59	·0883					
7. 30	26. 0							
7. 50	22. 0							
8. 42	26. 20							
	***							
10. 5	25. 50							
	***							
16. 41	26. 45							
	***							
21. 30	26. 0							
	***							
23. 18	31. 50							
23. 59	31. 35							
Feb. 12		Feb. 12				Feb. 12		
0. 0	21. 31. 35	0. 0	·0883			1. 0	53·0	
	***	0. 21	·0887			3. 0	55·0	
0. 57	32. 35	1. 36	·0889			9. 0	53·8	
	***	1. 53	·0892			21. 45	49·5	
2. 14	32. 30	2. 29	·0891					
2. 30	31. 0	3. 26	·0901					
	***	4. 41	·0901					
3. 4	31. 30	5. 2	·0897					
5. 23	27. 25	5. 35	·0903					
	***		***					
6. 30	28. 20	6. 43	·0901					
	***	7. 13	·0915					
7. 2	24. 0	7. 29	·0914					
7. 20	26. 25	7. 42	·0911					
7. 38	22. 30	8. 21	·0913					
	***	8. 46	·0907					
8. 16	25. 40	9. 22	·0897					
	***	9. 43	·0897					
9. 33	22. 50	9. 49	·0901					
9. 48	20. 30	10. 10	·0903					
	***	10. 31	·0897					
10. 15	22. 50	11. 36	·0903					
10. 33	22. 20	12. 29	·0900					
10. 54	23. 15	14. 0	·0907					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 12		Feb. 12						
h m	° ′ ″	h m		h m		h m	°	
11. 56	21. 21. 50	14. 38	·0905					
	***	17. 52	·0914					
13. 3	25. 0	20. 19	·0907					
13. 32	24. 30	23. 30	·0891					
	***	23. 59	·0893					
14. 42	27. 20							
	***							
17. 58	25. 55							
19. 20	25. 50							
21. 8	23. 40							
21. 50	24. 0							
23. 59	32. 15							
Feb. 13		Feb. 13				Feb. 13		
0. 0	21. 32. 15	0. 0	·0893			7. 0	53·0	
2. 6	33. 5	1. 57	·0901			21. 0	45·0	
3. 30	30. 15	3. 7	·0897					
5. 4	27. 45	5. 17	·0905					
5. 47	26. 20	6. 16	·0905					
16. 0	27. 0	10. 28	·0913					
18. 50	26. 10	14. 50	·0915					
19. 30	28. 0	18. 46	·0924					
20. 20	24. 0	19. 15	·0918					
21. 26	23. 40	19. 54	·0923					
22. 20	26. 10	20. 20	·0915					
23. 34	32. 55	22. 52	·0895					
23. 59	31. 25	23. 35	·0891					
		23. 59	·0887					
Feb. 14		Feb. 14				Feb. 14		
0. 0	21. 31. 25	0. 0	·0887			1. 0	50·5	
	***	0. 26	·0885			3. 0	53·0	
0. 48	35. 0	0. 45	·0888			9. 0	52·5	
1. 35	32. 30	1. 13	·0885			21. 0	45·0	
1. 56	33. 30	1. 46	·0892					
5. 42	27. 40	2. 15	·0891					
9. 30	26. 0	2. 56	·0897					
11. 16	26. 10	7. 13	·0909					
12. 15	26. 45	10. 43	·0918					
13. 28	25. 50	10. 58	·0914					
	***	12. 25	·0917					
15. 7	27. 50	12. 51	·0920					
	***		***					
16. 32	28. 0	13. 43	·0921					
17. 4	26. 30	13. 48	·0915					
	***	16. 0	·0927					
21. 33	23. 20		***					
	***	19. 54	·0926					
23. 59	31. 30	20. 36	·0923					
		21. 19	·0911					
		22. 45	·0903					
		23. 19	·0903					
		23. 41	·0905					
		23. 59	·0900					
Feb. 15		Feb. 15				Feb. 15		
0. 0	21. 31. 30	0. 0	·0900			1. 0	48·0	
0. 13	32. 0	0. 14	·0903			3. 0	50·8	

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 15		Feb. 15				Feb. 15		
h m	° ′ ″	h m		h m		h m	°	°
0. 54	21. 31. 10	1. 28	·0898			9. 0	53·0	
1. 12	32. 25	2. 36	·0904			21. 0	51·0	
	***	2. 51	·0899					
2. 38	33. 0	4. 23	·0910					
2. 50	30. 30	5. 0	·0908					
	***	5. 52	·0896					
5. 5	29. 55	6. 17	·0901					
5. 20	28. 30		***					
5. 45	28. 30	7. 52	·0894					
6. 10	27. 10	8. 12	·0903					
7. 8	27. 30	8. 28	·0896					
	***	9. 0	·0906					
8. 6	23. 15	9. 38	·0901					
8. 18	24. 20	10. 10	·0905					
8. 43	23. 0	10. 13	·0911					
9. 14	24. 25	10. 18	·0899					
9. 58	19. 30	10. 36	·0905					
10. 16	21. 50	10. 54	·0894					
10. 35	12. 55	11. 38	·0893					
11. 4	13. 25		***					
12. 26	26. 0	12. 52	·0903					
14. 52	28. 25	14. 29	·0906					
	***	17. 14	·0917					
18. 42	26. 20		***					
	***	18. 16	·0913					
20. 17	22. 30		***					
	***	18. 33	·0917					
23. 8	26. 40		***					
23. 59	31. 25	20. 32	·0905					
			***					
		22. 7	·0888					
		23. 40	·0886					
		23. 59	·0891					
Feb. 16		Feb. 16				Feb. 16		
0. 0	21. 31. 25	0. 0	·0891			1. 0	54·0	
0. 37	26. 35	0. 40	·0881			3. 0	57·0	
1. 0	33. 30	1. 5	·0888			9. 0	58·0	
1. 26	31. 50	1. 23	·0883			21. 0	53·0	
	***	2. 12	·0885					
3. 30	30. 45	2. 37	·0883					
3. 45	31. 30	2. 54	·0889					
4. 16	28. 35		***					
5. 12	29. 0	3. 45	·0885					
6. 43	25. 15	4. 10	·0879					
8. 10	23. 50	5. 7	·0895					
9. 17	24. 30	6. 22	·0900					
9. 58	21. 50	7. 16	·0897					
	***	8. 12	·0901					
10. 53	23. 30	8. 54	·0896					
	***	9. 30	·0901					
13. 34	26. 45		***					
	***	10. 29	·0900					
15. 15	29. 55		***					
	***	11. 52	·0907					
18. 13	26. 0		***					
	***	13. 59	·0905					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 16		Feb. 16						
h m	° ′ ″	h m		h m		h m	°	°
19. 29	21. 29. 15	14. 30	·0909					
19. 43	27. 0		***					
19. 56	29. 20	15. 10	·0906					
	***	15. 55	·0909					
21. 20	25. 55	17. 10	·0919					
	***		***					
23. 15	28. 20	17. 53	·0912					
23. 42	31. 50		***					
23. 59	30. 15	19. 12	·0917					
			***					
		19. 41	·0913					
			***					
		20. 1	·0917					
			***					
		21. 49	·0897					
			***					
		23. 15	·0895					
		23. 39	·0884					
		23. 47	·0887					
		23. 59	·0884					
Feb. 17		Feb. 17				Feb. 17		
0. 0	21. 30. 15	0. 0	·0884			1. 0	56·0	
	***	0. 11	·0881			3. 0	58·0	
0. 58	34. 0	0. 14	·0885			9. 0	58·0	
	***	0. 30	·0883			21. 0	50·8	
1. 37	32. 15	0. 49	·0889					
	***	1. 36	·0885					
1. 53	33. 55	1. 57	·0889					
	***		***					
2. 38	33. 30	2. 54	·0881					
3. 0	31. 30	3. 10	·0883					
3. 32	33. 0	3. 51	·0877					
	***	4. 26	·0893					
4. 10	28. 40	5. 5	·0898					
5. 15	28. 30		***					
7. 50	25. 0	6. 45	·0899					
8. 25	21. 40	7. 5	·0904					
9. 20	24. 55	7. 23	·0899					
11. 13	23. 50	7. 43	·0900					
11. 34	27. 30	8. 13	·0894					
12. 10	27. 30	8. 26	·0899					
13. 13	24. 0		***					
	***	9. 54	·0905					
15. 32	28. 0	11. 1	·0901					
15. 57	33. 0	11. 41	·0903					
16. 30	28. 0	12. 13	·0910					
17. 5	25. 50	12. 52	·0907					
	***	13. 15	·0908					
18. 48	24. 30	13. 37	·0903					
	***	15. 31	·0903					
21. 23	22. 25	15. 49	·0907					
	***	16. 15	·0905					
22. 47	26. 10	17. 5	·0909					
23. 3	28. 30	18. 52	·0912					
	***	19. 15	·0917					
23. 59	31. 30	20. 11	·0908					
			***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
		Feb. 17						
h m	° ' "	h m		h m		h m	°	°
		22. 15	·0890					
		23. 31	·0885					
		23. 59	·0876					
Feb. 18		Feb. 18				Feb. 18		
0. 0	21. 31. 30	0. 0	·0876			1. 0	52 ·5	
0. 26	33. 55	0. 13	·0869			3. 0	54 ·0	
0. 50	34. 30	2. 0	·0886			9. 0	53 ·0	
1. 16	33. 25		***			21. 0	45 ·0	
1. 36	35. 30	3. 5	·0899					
2. 7	33. 40		***					
3. 16	31. 30	5. 22	·0900					
4. 17	28. 35		***					
5. 42	26. 20	8. 10	·0912					
8. 46	25. 0		***					
9. 54	24. 35	11. 49	·0913					
	***	12. 13	·0920					
10. 43	21. 20	13. 12	·0917					
12. 4	23. 50	13. 24	·0920					
12. 40	21. 45	13. 44	·0919					
13. 11	23. 25	14. 29	·0924					
13. 32	23. 35	15. 32	·0926					
14. 15	26. 45	16. 22	·0931					
15. 28	28. 5	19. 10	·0935					
16. 26	26. 15		***					
	***	20. 53	·0925					
18. 52	25. 55		***					
	***	22. 30	·0908					
21. 18	23. 10	22. 50	·0911					
	***	23. 30	·0907					
23. 59	31. 20		(†)					
Feb. 19		Feb. 19				Feb. 19		
0. 0	21. 31. 20		(†)			1. 0	48 ·0	
0. 39	31. 50	0. 15	·0903			3. 0	51 ·0	
	***		***			9. 0	52 ·1	
2. 33	32. 20	0. 30	·0908			22. 5	49 ·0	
3. 56	28. 35		***					
8. 50	26. 0	2. 0	·0904					
8. 55	25. 30		***					
10. 4	25. 20	3. 30	·0909					
10. 28	21. 45	4. 0	·0905					
10. 49	23. 25	4. 29	·0908					
11. 16	24. 0	5. 16	·0904					
	***	5. 45	·0909					
17. 10	25. 40	10. 15	·0917					
	***	10. 29	·0923					
21. 2	23. 0	10. 53	·0918					
	***	11. 13	·0923					
23. 59	30. 35	12. 31	·0922					
		12. 51	·0925					
			***					
		18. 28	·0930					
		19. 30	·0933					
		22. 22	·0910					
		23. 59	·0916					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Feb. 20		Feb. 20				Feb. 20		
h m	° ' "	h m		h m		h m	°	°
0. 0	21. 30. 35	0. 0	·0916			9. 50	49 ·5	
	***	0. 44	·0917			21. 0	49 ·0	
1. 27	33. 30	1. 28	·0927					
	***	1. 48	·0921					
4. 13	28. 50	2. 11	·0927					
	***		***					
9. 26	25. 20	3. 22	·0921					
9. 52	23. 45	3. 53	·0927					
10. 12	25. 30	4. 16	·0919					
14. 17	26. 25	6. 32	·0925					
19. 28	25. 30	7. 12	·0921					
20. 40	25. 0	11. 9	·0927					
22. 15	27. 45	17. 29	·0932					
	***	20. 3	·0924					
23. 30	28. 30	22. 18	·0905					
23. 59	30. 10	22. 50	·0907					
		23. 0	·0904					
		23. 13	·0908					
		23. 27	·0899					
		23. 59	·0898					
Feb. 21		Feb. 21				Feb. 21		
0. 0	21. 30. 10	0. 0	·0898			1. 0	53 ·0	
1. 30	31. 25	0. 27	·0901			3. 0	57 ·0	
2. 36	31. 40	0. 58	·0897			9. 0	58 ·0	
	***	2. 14	·0898			21. 0	51 ·0	
4. 12	27. 50	2. 30	·0901					
8. 45	25. 30	2. 40	·0900					
	***	2. 48	·0904					
13. 10	23. 40	3. 0	·0898					
16. 18	25. 5	3. 10	·0904					
18. 7	24. 15	3. 53	·0897					
21. 8	21. 0	4. 43	·0901					
23. 59	29. 45	6. 15	·0901					
		6. 40	·0909					
		7. 10	·0907					
		7. 30	·0910					
		8. 12	·0910					
		8. 45	·0904					
		9. 21	·0910					
		10. 17	·0913					
		10. 31	·0918					
		11. 29	·0914					
			***					
		13. 40	·0915					
		18. 18	·0927					
		20. 13	·0920					
		20. 59	·0911					
		23. 52	·0894					
		23. 59	·0895					
Feb. 22		Feb. 22				Feb. 22		
0. 0	21. 29. 45	0. 0	·0895			1. 0	54 ·2	
0. 17	31. 20	0. 43	·0899			3. 0	56 ·0	
1. 36	32. 40	2. 13	·0901			9. 0	56 ·5	
1. 50	31. 50	2. 30	·0905			21. 0	47 ·0	
2. 32	31. 20	2. 42	·0903					
5. 12	26. 20	4. 21	·0912					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 22		Feb. 22						
h m	° ' "	h m		h m		h m	°	°
6. 18	21. 26. 10	6. 19	·0910					
6. 59	25. 30	6. 51	·0912					
7. 30	27. 20	6. 55	·0944					
8. 12	26. 0	7. 25	·0925					
	***		***					
8. 54	25. 10	8. 0	·0927					
9. 43	22. 20		***					
10. 8	22. 30	10. 11	·0919					
10. 17	21. 50	10. 14	·0926					
	(†)	10. 17	·0918					
11. 13	25. 15	10. 41	·0931					
11. 48	3. 0	10. 46	·0926					
12. 3	12. 50	10. 52	·0931					
	***	11. 14	·0919					
12. 20	13. 0	11. 35	·0917					
12. 45	4. 50	11. 55	·0935					
13. 0	11. 10	12. 32	·0881					
	***	12. 50	·0894					
13. 32	16. 55	13. 10	·0892					
	***	13. 36	·0901					
13. 45	15. 0	14. 0	·0892					
	***	14. 8	·0897					
14. 12	15. 5	14. 12	·0895					
	***	14. 52	·0928					
14. 17	17. 50	15. 0	·0927					
14. 28	24. 0	15. 10	·0933					
	***	15. 19	·0927					
15. 37	27. 0		***					
	***	15. 55	·0931					
16. 11	26. 0		***					
16. 32	22. 0	16. 28	·0928					
16. 38	24. 0	16. 36	·0938					
16. 47	20. 45	16. 42	·0931					
	***	17. 0	·0931					
17. 16	26. 0		***					
	***	17. 29	·0916					
17. 50	24. 0	17. 57	·0911					
18. 8	25. 55	18. 11	·0915					
18. 30	22. 0		***					
18. 34	25. 40	19. 3	·0917					
18. 46	23. 20	19. 22	·0929					
19. 2	27. 30		***					
	***	20. 0	·0931					
19. 26	24. 10		***					
19. 31	27. 50	20. 58	·0916					
	***		***					
19. 52	24. 50	21. 44	·0916					
20. 1	26. 5	21. 59	·0909					
20. 8	24. 45		(†)					
20. 11	26. 40							
20. 28	22. 0							
20. 32	24. 20							
20. 37	23. 40							
20. 43	23. 45							
20. 47	22. 30							
20. 50	25. 0							
	***							
21. 0	23. 0							
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 22								
h m	' "	h m		h m		h m	°	°
21. 30	21. 27. 0							
21. 38	23. 45							
	***							
21. 54	27. 20							
	(†)							
23. 45	31. 50							
23. 59	31. 20							
Feb. 23		Feb. 23				Feb. 23		
0. 0	21. 31. 20	0. 0	·0887			1. 0	50 ·9	
	***	0. 27	·0891			3. 0	54 ·0	
1. 42	34. 15	0. 44	·0895			9. 0	53 ·7	
1. 54	33. 25	1. 7	·0895			21. 0	44 ·8	
2. 13	34. 20	1. 26	·0899					
2. 31	29. 50	1. 53	·0897					
2. 43	32. 20	2. 6	·0904					
3. 0	31. 35	2. 15	·0906					
3. 10	32. 0	2. 22	·0897					
	***		***					
3. 45	27. 15	2. 58	·0899					
	***	3. 22	·0896					
4. 16	28. 0		***					
	***	3. 54	·0901					
5. 34	25. 5	4. 19	·0897					
	***	4. 21	·0899					
5. 54	26. 0	4. 58	·0896					
6. 15	17. 40	5. 6	·0898					
6. 36	22. 30	5. 23	·0893					
6. 48	22. 40	5. 31	·0894					
6. 55	19. 40	6. 2	·0877					
7. 2	20. 30	6. 15	·0888					
7. 15	13. 35	6. 29	·0890					
7. 18	14. 0	6. 40	·0888					
7. 30	8. 25	6. 54	·0902					
7. 43	12. 0	7. 0	·0891					
7. 50	11. 0	7. 11	·0906					
8. 12	17. 40	7. 13	·0905					
8. 30	24. 30	7. 16	·0910					
	***	7. 42	·0867					
8. 46	19. 30	7. 44	·0872					
9. 10	21. 15	8. 0	·0850					
9. 42	12. 15	8. 30	·0875					
9. 56	18. 40	8. 42	·0888					
10. 6	19. 0	9. 5	·0877					
10. 17	5. 30	9. 29	·0868					
10. 29	8. 0	10. 7	·0891					
10. 43	0. 15	10. 15	·0886					
10. 50	9. 30	10. 28	·0903					
11. 5	8. 0	10. 40	·0893					
11. 32	15. 0	10. 55	·0909					
11. 46	14. 5	11. 11	·0881					
12. 13	15. 0	11. 42	·0896					
12. 30	19. 30	11. 49	·0895					
12. 45	19. 20	12. 11	·0904					
13. 3	18. 0	12. 32	·0905					
13. 34	21. 40	12. 53	·0901					
14. 15	21. 50		***					
14. 32	24. 30	14. 11	·0913					
			***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 23		Feb. 23						
h m	° ′ ″	h m		h m		h m	°	°
15. 4	21. 25. 30	15. 0	·0933					
15. 16	22. 35	15. 22	·0926					
15. 37	23. 45	15. 35	·0931					
15. 47	22. 30	15. 52	·0926					
16. 1	23. 0	16. 11	·0927					
16. 26	31. 20	16. 44	·0922					
16. 43	31. 30	18. 31	·0940					
17. 0	29. 40	19. 0	·0926					
17. 52	31. 30	19. 35	·0933					
18. 12	33. 50	20. 39	·0906					
18. 55	35. 0		***					
19. 14	39. 0	21. 31	·0909					
19. 19	38. 45	21. 55	·0903					
	***	22. 16	·0907					
20. 15	32. 45	22. 46	·0902					
	***	23. 59	·0900					
20. 42	36. 0							
	***							
21. 2	35. 10							
21. 12	33. 30							
	***							
22. 11	37. 0							
22. 30	35. 0							
	***							
22. 48	35. 0							
	(†)							
23. 59	35. 40							
Feb. 24		Feb. 24				Feb. 24		
0. 0	21. 35. 40	0. 0	·0900			1. 0	48·0	
0. 11	35. 30	0. 15	·0903			3. 0	52·0	
0. 15	38. 30	0. 22	·0900			9. 0	55·0	
0. 46	33. 20	0. 40	·0904			21. 0	45·7	
0. 59	34. 50	0. 52	·0903					
1. 12	36. 55	1. 10	·0908					
1. 40	38. 0	1. 18	·0906					
1. 46	34. 30	1. 36	·0926					
1. 50	34. 30	1. 44	·0918					
2. 4	31. 30	1. 55	·0919					
	***	2. 0	·0915					
2. 27	31. 30	2. 8	·0920					
2. 48	33. 25	2. 12	·0915					
	***	2. 16	·0918					
3. 42	30. 0	2. 28	·0919					
3. 50	31. 40	2. 35	·0923					
	***		***					
4. 12	29. 0	3. 36	·0904					
4. 26	30. 0	3. 44	·0911					
4. 40	26. 30	4. 7	·0906					
5. 0	33. 0	4. 17	·0911					
5. 12	31. 30	4. 30	·0903					
5. 20	34. 30	4. 44	·0913					
5. 27	34. 40	4. 53	·0905					
5. 46	27. 30		***					
5. 58	25. 30	5. 13	·0906					
6. 11	26. 10	5. 34	·0879					
6. 15	27. 30	5. 42	·0884					
6. 19	26. 30	6. 0	·0897					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 24		Feb. 24						
h m	° ′ ″	h m		h m		h m	°	°
6. 28	21. 20. 15	6. 29	·0841					
6. 46	19. 40	6. 43	[illegible]					
7. 3	30. 35	6. 56	·0881					
7. 13	24. 0	7. 5	·0893					
7. 26	26. 30	7. 14	·0857					
7. 33	28. 30	7. 24	·0903					
7. 47	31. 25	7. 49	·0869					
8. 19	20. 30	8. 10	·0879					
	***	8. 30	·0880					
8. 48	21. 30	9. 13	·0896					
9. 5	26. 15		***					
	***	12. 46	·0909					
12. 45	27. 0	13. 2	·0915					
13. 6	28. 10	13. 10	·0910					
13. 17	26. 55	13. 29	·0916					
13. 22	27. 30	13. 37	·0911					
13. 45	25. 45	13. 50	·0910					
13. 53	26. 30	13. 58	·0915					
14. 12	24. 20	14. 11	·0913					
	***	14. 15	·0917					
14. 43	24. 30	14. 43	·0916					
	***	15. 52	·0948					
15. 10	26. 30	16. 27	·0933					
15. 30	23. 0	16. 52	·0941					
	***	17. 15	·0937					
15. 47	23. 0	17. 35	·0925					
	***	17. 41	·0926					
16. 27	29. 0	17. 52	·0921					
16. 38	27. 45	18. 23	·0919					
16. 47	28. 30	18. 40	·0912					
17. 39	22. 20	18. 50	·0917					
	***	19. 13	·0921					
18. 27	26. 20	19. 52	·0903					
18. 42	24. 30	20. 9	·0901					
	***	20. 58	·0912					
20. 3	28. 0	21. 13	·0909					
20. 14	26. 30	21. 30	·0910					
20. 19	28. 0	21. 55	·0902					
20. 30	27. 0	22. 7	·0905					
	***	22. 46	·0891					
20. 48	26. 45		(†)					
20. 59	28. 0							
21. 12	26. 30							
	***							
21. 27	29. 0							
21. 38	27. 5							
21. 57	26. 30							
22. 30	31. 20							
22. 44	32. 10							
	(†)							
23. 59	37. 25							
Feb. 25		Feb. 25				Feb. 25		
0. 0	21. 37. 25	0. 0	·0886			1. 0	50·0	
	***	0. 50	·0893			3. 0	53·8	
1. 15	38. 50	1. 6	·0890			9. 0	56·0	
2. 22	35. 20	1. 56	·0896			21. 0	46·5	
	***	2. 15	·0895					
			***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 25		Feb. 25						
h m	° ′ ″	h m		h m		h m	°	°
2. 57	21. 36. 30	2. 52	·0903					
	***	3. 3	·0900					
4. 12	33. 25		***					
5. 11	33. 0	4. 4	·0897					
	***	5. 3	·0902					
6. 8	29. 0		***					
6. 30	22. 30	6. 10	·0897					
6. 40	29. 20	6. 31	·0928					
7. 0	23. 30	6. 42	·0916					
7. 12	26. 0	6. 56	·0913					
7. 28	25. 50	7. 5	·0917					
7. 46	28. 30	7. 13	·0911					
8. 4	27. 0	7. 27	·0911					
8. 38	28. 30	7. 54	·0901					
9. 7	27. 0	8. 15	·0905					
13. 15	28. 30	11. 52	·0913					
17. 26	26. 50	16. 26	·0929					
	***	17. 22	·0929					
19. 17	25. 15	18. 7	·0937					
20. 6	25. 20	19. 10	·0934					
	***	20. 13	·0921					
21. 45	30. 0	21. 30	·0913					
22. 11	30. 0	21. 40	·0919					
22. 17	29. 0	22. 18	·0896					
22. 26	33. 30	22. 35	·0904					
22. 48	31. 0	22. 52	·0886					
23. 7	31. 0	23. 3	·0882					
23. 18	35. 0	23. 15	·0891					
23. 41	35. 45	23. 36	·0889					
	***	23. 59	·0901					
23. 59	38. 55							
Feb. 26		Feb. 26				Feb. 26		
0. 0	21. 38. 55	0. 0	·0901			1. 0	49 ·0	
	***	0. 34	·0916			3. 0	51 ·8	
0. 28	41. 0	0. 45	·0913			9. 0	52 ·0	
0. 45	41. 0	0. 58	·0927			22. 35	48 ·0	
0. 56	46. 0	1. 13	·0915					
1. 8	41. 5	1. 22	·0924					
1. 15	39. 10	1. 28	·0919					
1. 19	42. 50	1. 50	·0923					
1. 44	40. 15	2. 3	·0908					
1. 50	41. 10		***					
2. 3	39. 0	3. 9	·0924					
2. 15	41. 30	3. 13	·0919					
2. 28	39. 10	3. 26	·0937					
2. 33	40. 50	3. 38	·0923					
2. 45	38. 30	3. 49	·0926					
2. 52	40. 5	3. 57	·0915					
	***	4. 15	·0945					
3. 16	40. 10	4. 32	·0901					
3. 24	43. 30	4. 43	·0917					
3. 33	39. 0	4. 54	·0895					
3. 42	33. 25	4. 59	·0896					
3. 47	36. 40	5. 23	·0872					
3. 56	33. 20	5. 42	·0887					
4. 0	34. 0	5. 54	·0887					
4. 4	33. 0	6. 1	·0881					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 26		Feb. 26						
h m	° ′ ″	h m		h m		h m	°	°
4. 18	21. 48. 50	6. 14	·0894					
4. 40	40. 35	6. 30	·0891					
4. 47	50. 0	7. 0	·0908					
4. 56	45. 0	7. 31	·0900					
5. 42	27. 20	7. 50	·0915					
5. 50	31. 10	8. 16	·0896					
6. 7	25. 30	8. 36	·0911					
	***	9. 7	·0892					
6. 32	23. 15	9. 25	·0902					
6. 46	26. 0	9. 45	·0897					
6. 57	25. 20	10. 16	·0907					
7. 8	27. 45	10. 29	·0905					
7. 32	25. 5		***					
7. 45	19. 30	11. 22	·0917					
	***	11. 30	·0912					
8. 13	22. 55	11. 44	·0916					
8. 27	17. 50	11. 58	·0907					
	***	12. 13	·0911					
9. 0	27. 0	12. 39	·0908					
9. 29	20. 0	13. 14	·0914					
9. 38	21. 20		***					
	***	15. 56	·0917					
10. 12	18. 45	18. 30	·0925					
	***		***					
10. 33	23. 15	21. 36	·0906					
11. 15	25. 50	21. 45	·0909					
11. 30	23. 50	22. 22	·0901					
11. 40	25. 35	22. 29	·0904					
11. 56	23. 15	23. 12	·0904					
12. 18	25. 0	23. 35	·0897					
	(†)	23. 49	·0900					
13. 26	27. 20	23. 59	·0898					
	***							
15. 47	27. 30							
	***							
20. 49	24. 0							
	***							
22. 30	28. 35							
	***							
23. 5	30. 45							
23. 50	35. 25							
23. 59	34. 30							
Feb. 27		Feb. 27				Feb. 27		
0. 0	21. 34. 30	0. 0	·0898			6. 40	50 ·2	
	***	1. 15	·0903			21. 0	44 ·0	
1. 47	38. 0		***					
	***	1. 54	·0896					
2. 18	37. 15		***					
	***	2. 39	·0903					
2. 43	38. 35	2. 45	·0896					
2. 52	37. 0	3. 9	·0909					
3. 6	38. 25	3. 15	·0918					
3. 14	37. 30	3. 29	·0896					
3. 18	40. 0	3. 44	·0900					
3. 28	33. 20	4. 7	·0895					
3. 47	33. 50	4. 39	·0915					
	***	4. 45	·0912					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers: of H. F. Magnet.	Readings of Thermometers: of V. F. Magnet.
Feb. 27		Feb. 27						
h m	° ′ ″	h m		h m		h m		
4. 12	21. 31. 20	4. 52	·0920					
	***	5. 0	·0914					
4. 41	32. 0	5. 11	·0919					
	***	5. 40	·0915					
5. 27	29. 50	5. 48	·0923					
7. 45	27. 30	5. 54	·0916					
	***	6. 5	·0922					
9. 13	26. 10	7. 16	·0916					
16. 7	23. 30	8. 11	·0922					
18. 53	25. 50		***					
19. 45	23. 30	9. 27	·0916					
20. 11	23. 30	9. 50	·0920					
20. 33	21. 50		***					
22. 32	24. 40	12. 4	·0919					
22. 56	27. 0	12. 22	·0921					
23. 8	26. 30	14. 30	·0921					
23. 15	29. 0	16. 10	·0930					
23. 30	27. 30	18. 56	·0933					
23. 39	30. 20	20. 0	·0929					
23. 59	31. 45	21. 27	·0912					
		21. 40	·0914					
		22. 29	·0899					
			***					
		23. 10	·0903					
		23. 15	·0897					
		23. 27	·0902					
		23. 46	·0898					
			(†)					
Feb. 28		Feb. 28				Feb. 28		
0. 0	21. 31. 45		(†)			1. 0	49 ·0	
0. 12	29. 0	0. 20	·0896			3. 0	53 ·2	
0. 18	32. 30	0. 34	·0902			9. 0	52 ·0	
0. 29	34. 30	0. 43	·0897			21. 0	48 ·0	
0. 43	33. 35		***					
1. 42	34. 5	2. 57	·0901					
1. 55	33. 10	3. 22	·0904					
2. 4	33. 50		***					
	***	4. 45	·0905					
2. 30	31. 10		***					
	***	7. 50	·0923					
3. 45	29. 15	8. 27	·0919					
	***	8. 45	·0897					
5. 0	27. 10	9. 38	·0902					
	***	10. 7	·0895					
7. 40	26. 40	10. 45	·0893					
	***	11. 10	·0897					
8. 8	27. 0	11. 26	·0894					
8. 47	21. 30		***					
9. 50	27. 35	12. 45	·0906					
10. 15	23. 45		***					
	***	13. 15	·0906					
11. 23	23. 0		***					
11. 48	20. 15	14. 11	·0917					
	***		***					
13. 17	21. 10	14. 56	·0907					
13. 48	16. 5		***					
14. 13	16. 25	16. 48	·0915					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers: of H. F. Magnet.	Readings of Thermometers: of V. F. Magnet.
Feb. 28		Feb. 28						
h m	° ′ ″	h m						
14. 32	21. 15. 55	18. 52	·0913					
14. 55	15. 30	19. 43	·0909					
15. 15	23. 10	20. 11	·0980					
15. 45	27. 5	20. 25	·0907					
16. 20	24. 45	21. 45	·0867					
	***	21. 58	·0889					
17. 20	26. 30	23. 44	·0881					
17. 46	25. 30	23. 54	·0881					
18. 18	26. 45							
	***							
19. 27	26. 10							
19. 47	24. 0							
	***							
21. 30	27. 0							
21. 40	29. 0							
23. 59	31. 30							
Mar. 1		Mar. 1				Mar. 1		
0. 0	21. 31. 30	0. 0	·0881			1. 0	52 ·2	
0. 38	32. 0	0. 39	·0874			3. 0	56 ·0	
0. 51	33. 20	0. 45	·0880			9. 7	57 ·0	
1. 4	32. 30	1. 53	·0876			21. 0	48 ·4	
1. 13	33. 10	4. 14	·0885					
1. 56	29. 30	4. 40	·0882					
4. 22	25. 25	5. 6	·0889					
	***	5. 24	·0885					
7. 3	25. 20	6. 7	·0889					
8. 39	26. 30	6. 30	·0884					
8. 47	25. 0	7. 13	·0890					
8. 53	20. 0	8. 15	·0890					
	***	8. 29	·0893					
10. 5	23. 10	8. 52	·0883					
11. 8	23. 25	9. 12	·0888					
12. 12	21. 0	9. 30	·0891					
	***	9. 45	·0887					
13. 58	23. 25	11. 15	·0887					
15. 27	23. 30	11. 51	·0895					
15. 50	20. 15	12. 28	·0889					
16. 17	18. 35	15. 13	·0900					
	***	15. 45	·0914					
20. 55	23. 30	16. 47	·0909					
21. 57	25. 30	18. 41	·0915					
22. 32	28. 30	21. 4	·0909					
22. 48	27. 40	21. 52	·0897					
	***	22. 0	·0901					
23. 30	32. 30	22. 43	·0895					
23. 59	32. 45	22. 53	·0897					
		23. 59	·0887					
Mar. 2		Mar. 2				Mar. 2		
0. 0	21. 32. 45	0. 0	·0887			1. 0	52 ·7	
	***	1. 30	·0888			3. 0	56 ·0	
2. 18	32. 30	2. 14	·0883			9. 0	55 ·5	
2. 39	36. 35	3. 11	·0885			21. 0	51 ·0	
3. 19	35. 20	3. 28	·0879					
3. 34	33. 50	4. 43	·0886					
4. 5	32. 30	5. 11	·0885					
4. 50	33. 0	5. 28	·0887					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 2		Mar. 2						
h m	° ′ ″	h m		h m		h m	°	°
6. 17	21. 30. 20	5. 50	·0886					
6. 30	31. 0	7. 43	·0897					
7. 28	29. 50	10. 39	·0904					
11. 50	29. 30	13. 35	·0907					
13. 45	28. 30	13. 59	·0911					
13. 52	29. 40	15. 5	·0911					
14. 13	27. 0	15. 44	·0915					
14. 33	25. 50	16. 27	·0911					
15. 4	25. 25	16. 42	·0916					
15. 41	22. 25	17. 12	·0911					
16. 37	23. 30	19. 15	·0914					
16. 49	26. 0	19. 43	·0907					
18. 12	26. 20	20. 42	·0908					
18. 53	27. 20	21. 43	·0888					
19. 4	27. 0	21. 52	·0891					
19. 26	29. 0	22. 0	·0887					
19. 45	27. 5	22. 25	·0884					
	***	23. 0	·0889					
21. 2	29. 40	23. 30	·0882					
	***	23. 42	·0885					
21. 45	29. 0	23. 59	·0881					
21. 53	30. 50							
	***							
22. 25	30. 10							
23. 0	33. 30							
23. 20	33. 30							
23. 44	36. 0							
23. 59	35. 30							
Mar. 3		Mar. 3				Mar. 3		
0. 0	21. 35. 30	0. 0	·0881			1. 0	55·6	
0. 23	39. 40	0. 27	·0888			3. 0	59·0	
0. 45	37. 0	0. 44	·0883			9. 0	60·0	
1. 13	36. 35	1. 38	·0893			21. 0	56·0	
3. 18	33. 0	2. 56	·0895					
3. 30	34. 45	3. 14	·0890					
3. 50	34. 20	3. 28	·0897					
4. 16	31. 15	3. 39	·0895					
	***	3. 55	·0896					
6. 45	30. 30	4. 21	·0892					
7. 0	32. 30	4. 43	·0895					
7. 30	19. 20	4. 55	·0891					
8. 7	29. 0	5. 10	·0892					
8. 16	27. 20	5. 19	·0887					
	***	5. 34	·0895					
9. 3	29. 0		***					
9. 45	29. 30	6. 27	·0892					
10. 56	26. 0	6. 52	·0897					
11. 0	30. 0	7. 14	·0885					
11. 15	21. 15	7. 40	·0899					
12. 0	12. 0	8. 10	·0885					
12. 27	18. 0	8. 27	·0894					
13. 6	27. 30	8. 55	·0891					
13. 17	27. 0	10. 10	·0897					
13. 30	27. 45	10. 28	·0891					
14. 13	25. 0	10. 53	·0888					
	***	11. 1	·0901					
14. 48	29. 30	11. 29	·0900					
	***		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 3		Mar. 3						
h m	° ′ ″	h m		h m		h m	°	°
15. 15	21. 29. 30	12. 36	·0875					
	***	13. 2	·0888					
16. 0	24. 0	13. 30	·0894					
16. 28	28. 5	14. 39	·0890					
	***	15. 7	·0897					
17. 8	25. 30	16. 11	·0897					
	***	16. 31	·0902					
18. 54	26. 30	16. 52	·0910					
19. 13	28. 0		***					
19. 17	26. 0	17. 30	·0910					
19. 32	27. 10	17. 52	·0903					
19. 45	25. 0	18. 22	·0907					
	***	18. 45	·0903					
20. 27	27. 5	19. 5	·0908					
20. 34	24. 10	19. 14	·0903					
20. 44	27. 10		***					
21. 3	25. 30	19. 36	·0902					
	***	19. 51	·0907					
21. 52	28. 0		***					
	***	20. 28	·0899					
22. 40	31. 10	20. 36	·0904					
22. 57	35. 45	22. 17	·0885					
	***	22. 52	·0876					
23. 30	38. 30	23. 13	·0877					
23. 50	37. 0	23. 24	·0869					
23. 59	37. 25	23. 59	·0862					
Mar. 4		Mar. 4				Mar. 4		
0. 0	21. 37. 25	0. 0	·0862			1. 0	59·5	
0. 22	40. 50	0. 18	·0874			3. 0	62·3	
0. 38	39. 20	0. 39	·0870			9. 0	63·0	
1. 11	43. 30	1. 21	·0884			21. 0	57·0	
1. 52	38. 45	1. 37	·0877					
2. 11	37. 0	2. 7	·0877					
2. 30	38. 0	2. 44	·0896					
2. 42	40. 30	3. 3	·0881					
3. 8	37. 50	3. 24	·0894					
3. 28	40. 40	3. 57	·0877					
3. 45	38. 35	4. 37	·0889					
	***	4. 47	·0880					
4. 45	36. 30	4. 56	·0881					
	***	5. 10	·0876					
5. 0	33. 0	5. 34	·0885					
5. 6	34. 0	5. 53	·0886					
5. 20	31. 20	6. 10	·0882					
6. 8	32. 30	6. 28	·0896					
	***	6. 44	·0899					
6. 46	27. 30	7. 10	·0888					
7. 7	30. 0	7. 15	·0895					
7. 24	25. 10	7. 42	·0887					
7. 32	27. 30	8. 2	·0897					
8. 30	23. 25	8. 24	·0897					
8. 47	23. 0	8. 44	·0909					
9. 0	27. 5	9. 15	·0880					
9. 38	21. 50	9. 51	·0890					
9. 48	23. 20	10. 17	·0883					
10. 6	23. 0	11. 30	·0885					
10. 21	21. 30	11. 56	·0903					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁏ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 4		Mar. 4						
h m	° ′ ″	h m		h m		h m	°	°
10. 45	21. 25. 0	12. 10	·0901					
11. 26	26. 55	12. 28	·0909					
11. 30	30. 5	13. 9	·0895					
11. 44	27. 10	14. 15	·0893					
12. 42	31. 30	16. 13	·0899					
	***	17. 12	·0897					
13. 36	28. 35	17. 40	·0892					
	***	18. 1	·0897					
15. 3	29. 55	18. 33	·0895					
	***	19. 46	·0899					
15. 57	29. 30		***					
16. 25	27. 5	21. 55	·0880					
17. 15	29. 0	22. 41	·0881					
17. 33	31. 25	23. 0	·0876					
18. 16	29. 45	23. 17	·0881					
18. 43	30. 10	23. 45	·0880					
19. 23	28. 0	23. 59	·0873					
	***							
20. 40	26. 30							
	***							
21. 3	28. 30							
21. 27	27. 25							
	***							
23. 2	33. 25							
23. 19	36. 45							
23. 59	36. 30							
Mar. 5		Mar. 5				Mar. 5		
0. 0	21. 36. 30	0. 0	·0873			1. 0	60·0	
	***	0. 11	·0871			3. 0	62·2	
0. 17	35. 30	0. 30	·0881			9. 0	61·3	
0. 39	38. 35	1. 15	·0873			22. 0	53·0	
1. 1	38. 0	1. 38	·0884					
1. 17	36. 35	2. 12	·0881					
1. 45	39. 45	2. 29	·0884					
2. 30	39. 15		***					
2. 43	39. 25	3. 6	·0874					
	***	3. 37	·0885					
3. 11	34. 30	3. 49	·0881					
3. 27	34. 35	4. 0	·0883					
	***	4. 16	·0873					
3. 54	32. 40	4. 55	·0882					
4. 13	34. 30	5. 23	·0877					
4. 40	33. 20		***					
5. 4	34. 10	6. 12	·0883					
6. 15	31. 15	6. 44	·0874					
6. 30	32. 0	7. 0	·0884					
7. 0	26. 40		***					
7. 15	29. 30	7. 44	·0883					
7. 38	30. 30	8. 4	·0915					
8. 3	22. 30	8. 18	·0890					
8. 17	29. 30	8. 30	·0899					
8. 30	23. 30	8. 40	·0889					
8. 46	25. 15	9. 0	·0886					
	***	9. 16	·0880					
9. 4	25. 20	10. 10	·0892					
9. 22	29. 5	10. 26	·0891					
	***	10. 46	·0909					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 5		Mar. 5						
h m	° ′ ″	h m		h m		h m		
10. 15	21. 29. 20	11. 11	·0908					
10. 40	22. 30	11. 31	·0895					
10. 45	23. 0	12. 12	·0891					
10. 55	21. 30		***					
11. 14	24. 10	14. 52	·0902					
11. 38	23. 25		***					
12. 26	26. 20	16. 26	·0903					
13. 23	29. 30		***					
13. 33	29. 5	17. 15	·0909					
	***		***					
14. 31	30. 30	18. 42	·0909					
14. 44	29. 50		***					
	***	20. 55	·0901					
19. 3	28. 30	21. 29	·0893					
	***		***					
20. 54	24. 10	23. 26	·0881					
21. 16	27. 20	23. 59	·0885					
22. 11	29. 35							
22. 32	30. 25							
	***							
23. 59	37. 20							
Mar. 6		Mar. 6				Mar. 6		
0. 0	21. 37. 20	0. 0	·0885			6. 25	58·5	
	***	0. 30	·0881			21. 0	54·0	
0. 52	37. 30	2. 22	·0893					
1. 28	35. 30	8. 7	·0905					
2. 37	34. 45	9. 55	·0905					
3. 55	31. 15	17. 18	·0917					
7. 15	28. 25	17. 51	·0915					
9. 0	28. 15	18. 11	·0917					
10. 7	29. 20	18. 43	·0913					
11. 20	29. 5		***					
15. 45	30. 5	20. 15	·0910					
17. 57	29. 30	22. 33	·0885					
18. 18	28. 50	23. 23	·0884					
18. 57	31. 0	23. 53	·0879					
	***	23. 59	·0881					
20. 11	26. 20							
20. 18	27. 15							
	***							
21. 12	26. 50							
	***							
22. 9	28. 55							
	***							
23. 59	35. 35							
Mar. 7		Mar. 7				Mar. 7		
0. 0	21. 35. 35	0. 0	·0881			1. 0	56·0	
	***	0. 36	·0879			3. 0	58·0	
1. 2	38. 10		***			9. 0	58·0	
	***	1. 30	·0884			21. 0	49·7	
2. 14	38. 15	1. 52	·0882					
	***	2. 21	·0889					
3. 54	34. 20	2. 45	·0887					
6. 50	30. 30	4. 42	·0897					
8. 30	30. 0	5. 52	·0897					
8. 45	29. 10		***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 7		Mar. 7						
h m	° ′ ″	h m		h m		h m	°	°
16. 12	21. 30. 30	8. 13	·0905					
18. 12	29. 45	18. 52	·0922					
	***	20. 0	·0919					
21. 7	24. 35	21. 45	·0897					
	***	22. 22	·0891					
22. 42	30. 55	23. 11	·0882					
22. 50	30. 35	23. 59	·0893					
	***							
23. 59	34. 40							
Mar. 8		Mar. 8				Mar. 8		
0. 0	21. 34. 40	0. 0	·0893			1. 0	51 ·0	
0. 15	34. 10	0. 16	·0889			3. 0	52 ·5	
0. 28	38. 40		***			9. 0	49 ·5	
0. 43	38. 0	0. 55	·0894			21. 0	42 ·0	
0. 50	39. 15	1. 12	·0883					
0. 56	38. 0		***					
1. 23	36. 25	2. 9	·0889					
2. 14	38. 15		***					
4. 0	34. 30	3. 43	·0894					
4. 32	32. 0	3. 53	·0884					
6. 15	29. 55		***					
10. 4	29. 30	4. 24	·0893					
14. 15	28. 25	4. 56	·0890					
14. 36	30. 30	6. 30	·0902					
15. 41	26. 30	7. 25	·0903					
15. 50	27. 30	9. 25	·0910					
16. 13	25. 0	11. 0	·0912					
17. 5	29. 0	11. 33	·0917					
	***	12. 0	·0914					
19. 7	28. 30	13. 13	·0919					
20. 32	26. 30		***					
21. 6	27. 0	14. 28	·0918					
22. 0	31. 30	15. 16	·0927					
22. 8	30. 30	15. 46	·0930					
22. 30	31. 30	16. 9	·0921					
22. 45	33. 35	16. 54	·0919					
22. 59	33. 30	18. 30	·0925					
23. 18	32. 15	20. 36	·0917					
23. 59	33. 0	22. 0	·0899					
		22. 37	·0886					
		23. 59	·0889					
Mar. 9		Mar. 9				Mar. 9		
0. 0	21. 33. 0	0. 0	·0889			1. 0	47 ·0	
0. 24	34. 40	0. 22	·0895			3. 0	50 ·0	
1. 55	36. 5	0. 45	·0892			9. 0	50 ·0	
2. 15	35. 0	1. 10	·0895			21. 0	41 ·0	
2. 30	35. 20	2. 16	·0892					
3. 48	32. 20	3. 18	·0892					
4. 0	32. 45	3. 49	·0894					
4. 45	29. 5	3. 58	·0897					
5. 50	27. 0	5. 21	·0896					
7. 0	29. 20	5. 50	·0903					
10. 30	25. 0	6. 22	·0895					
10. 45	20. 0	6. 42	·0898					
11. 17	26. 10	7. 2	·0899					
11. 48	22. 5	7. 49	·0905					
	***		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 9		Mar. 9						
h m	° ′ ″	h m		h m		h m	°	°
13. 17	21. 26. 20	10. 35	·0912					
13. 45	25. 50	10. 52	·0904					
14. 10	26. 40	11. 25	·0901					
14. 28	26. 5	11. 44	·0911					
14. 57	27. 30	12. 5	·0915					
18. 2	27. 45	12. 21	·0909					
	***		***					
20. 27	23. 55	14. 12	·0925					
	***	14. 22	·0921					
21. 40	24. 30		***					
22. 3	26. 40	17. 40	·0933					
22. 19	27. 5	18. 15	·0932					
23. 21	33. 0	19. 0	·0935					
	***	20. 4	·0926					
23. 46	34. 0	20. 37	·0925					
	(†)	21. 39	·0915					
		21. 45	·0918					
		22. 18	·0903					
		22. 42	·0907					
		23. 13	·0900					
		23. 40	·0896					
		23. 59	·0900					
Mar. 10		Mar. 10				Mar. 10		
	(†)	0. 0	·0900			1. 0	47 ·2	
0. 13	21. 31. 5	0. 15	·0894			3. 0	52 ·0	
0. 28	30. 55		***			9. 6	53 ·0	
1. 4	33. 10	0. 58	·0904			21. 0	45 ·0	
	***	1. 21	·0897					
1. 52	34. 0	1. 52	·0901					
2. 13	31. 30	2. 15	·0896					
	***	2. 38	·0901					
3. 15	30. 0		***					
3. 20	30. 40	4. 52	·0894					
	***	5. 10	·0899					
4. 46	25. 20	5. 28	·0904					
5. 0	26. 30	5. 42	·0899					
	***	5. 55	·0903					
5. 32	24. 0	6. 15	·0893					
	***	6. 38	·0895					
6. 43	23. 15		***					
6. 58	23. 50	7. 21	·0892					
7. 17	22. 45	7. 35	·0896					
7. 30	23. 30	7. 46	·0887					
7. 56	20. 0	8. 9	·0883					
	***	8. 22	·0884					
9. 13	20. 20	8. 38	·0892					
	***	8. 45	·0891					
9. 45	16. 50	9. 0	·0898					
10. 28	21. 40	9. 22	·0893					
10. 50	22. 30		***					
	***	10. 0	·0895					
11. 25	18. 0	10. 58	·0909					
11. 40	19. 30	11. 22	·0906					
11. 56	16. 25	11. 34	·0909					
	***	11. 48	·0906					
13. 18	25. 35	11. 57	·0911					
13. 30	24. 30	12. 12	·0893					
13. 45	26. 0	12. 23	·0905					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.10		Mar.10						
h m	° ' "	h m		h m		h m	°	
14. 3	21. 23. 45	12. 42	·0897					
	***	13. 2	·0903					
14. 50	27. 0	13. 21	·0913					
15. 15	23. 50	13. 33	·0910					
15. 32	28. 55		***					
16. 40	25. 40	15. 7	·0913					
17. 20	25. 20	15. 54	·0925					
17. 28	23. 45	16. 5	·0923					
			***					
17. 40	25. 0							
	***	17. 47	·0929					
			***					
18. 12	22. 40							
	***	18. 8	·0940					
			***					
18. 36	24. 0							
	***	18. 52	·0930					
19. 30	21. 50	19. 15	·0934					
	***		***					
19. 52	22. 50	20. 14	·0931					
20. 4	21. 0	20. 50	·0923					
	***	20. 59	·0924					
20. 37	23. 30	21. 31	·0909					
20. 45	22. 0	21. 43	·0912					
	***		***					
21. 30	26. 5	23. 4	·0895					
	***	23. 18	·0902					
22. 57	26. 45	23. 59	·0899					
	***							
23. 59	33. 0							
Mar.11		Mar.11				Mar.11		
0. 0	21. 33. 0	0. 0	·0899			1. 0	51 ·0	
0. 17	31. 30	0. 21	·0891			3. 0	54 ·0	
	***		***			9. 0	55 ·5	
2. 18	33. 30	2. 0	·0895			21. 0	54 ·8	
	***	2. 15	·0899					
3. 14	31. 35	2. 39	·0896					
3. 30	32. 40		***					
4. 2	28. 45	3. 14	·0900					
	***	3. 43	·0911					
5. 43	25. 35	4. 13	·0898					
	***		***					
7. 8	25. 30	5. 15	·0913					
7. 30	22. 50	5. 30	·0909					
7. 53	25. 0		***					
8. 15	21. 20	6. 21	·0914					
8. 48	24. 25		***					
	***	6. 52	·0908					
12. 20	26. 5	7. 39	·0925					
12. 30	27. 40		***					
12. 57	22. 35	8. 13	·0918					
13. 15	20. 45	8. 43	·0931					
13. 32	21. 0	9. 10	·0918					
14. 3	30. 0		***					
14. 45	21. 50	11. 15	·0923					
	***	11. 36	·0921					
16. 15	25. 30	12. 30	·0924					
16. 38	23. 5	12. 48	·0937					
	***	13. 28	·0918					
19. 20	26. 30	13. 44	·0915					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.11		Mar.11						
h m	° ' "	h m		h m		h m	°	
19. 48	21. 23. 35	14. 28	·0929					
20. 0	26. 5	14. 41	·0925					
	***	14. 59	·0926					
20. 28	24. 0	15. 15	·0921					
20. 37	25. 35	16. 4	·0923					
20. 59	23. 30	16. 14	·0927					
21. 17	27. 5	16. 26	·0926					
21. 25	25. 30	16. 43	·0930					
22. 3	26. 5		***					
	***	18. 8	·0931					
23. 59	29. 40	18. 14	·0926					
		18. 40	·0931					
		19. 0	·0923					
		19. 57	·0922					
		20. 28	·0912					
		20. 54	·0913					
		21. 2	·0919					
			***					
		22. 15	·0902					
			***					
		23. 2	·0902					
		23. 59	·0893					
Mar.12		Mar.12				Mar.12		
0. 0	21. 29. 40	0. 0	·0893			1. 0	58 ·0	
1. 16	31. 50	1. 15	·0893			3. 0	58 ·8	
	***	2. 0	·0903			9. 0	58 ·5	
1. 55	35. 50	2. 39	·0889			22. 10	56 ·0	
2. 41	32. 0	3. 2	·0891					
3. 3	31. 15	3. 27	·0909					
3. 25	33. 10		***					
3. 45	30. 25	3. 47	·0904					
3. 59	30. 20	4. 11	·0907					
4. 30	28. 15	5. 9	·0905					
5. 27	26. 45	5. 27	·0913					
5. 58	23. 20	5. 54	·0911					
6. 37	13. 45	6. 12	·0905					
7. 4	22. 0	6. 46	·0917					
7. 15	25. 0	7. 2	·0910					
10. 50	25. 30	7. 12	·0913					
11. 26	24. 35		***					
11. 30	15. 20	11. 29	·0919					
	***	11. 53	·0940					
13. 12	24. 30	12. 13	·0918					
	***	12. 27	·0923					
14. 41	23. 30		***					
15. 10	27. 0	12. 58	·0915					
15. 33	24. 0		***					
	***	13. 40	·0916					
16. 15	26. 40		***					
16. 46	20. 30	15. 44	·0933					
	***	16. 14	·0924					
17. 15	20. 45	16. 45	·0929					
18. 12	26. 20		***					
	***	19. 13	·0924					
19. 17	24. 50	19. 36	·0913					
	***		***					
20. 2	28. 15	20. 50	·0919					
	***							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 12		Mar. 12						
h m	° ′ ″	h m		h m		h m	°	°
20. 29	21. 24. 25	21. 45	·0907					
	***	22. 12	·0907					
23. 13	28. 30	23. 10	·0895					
23. 20	30. 40	23. 59	·0895					
23. 59	33. 15							
Mar. 13		Mar. 13				Mar. 13		
0. 0	21. 33. 15	0. 0	·0895			11. 0	56 ·5	
1. 33	34. 35	1. 49	·0905			21. 0	54 ·8	
2. 50	33. 20	2. 2	·0901					
2. 56	33. 30	2. 31	·0907					
3. 48	30. 30	2. 36	·0904					
4. 11	30. 30	2. 45	·0908					
4. 53	27. 45	2. 51	·0907					
7. 58	24. 0	3. 0	·0912					
	***	3. 22	·0909					
11. 0	25. 25		***					
14. 47	25. 40	5. 30	·0913					
15. 0	24. 35	6. 36	·0912					
	***	7. 22	·0915					
16. 13	25. 45	8. 9	·0909					
16. 44	24. 20	10. 10	·0917					
16. 45	25. 10	12. 51	·0917					
17. 8	24. 0		***					
17. 15	25. 20	15. 51	·0920					
	***	17. 13	·0917					
20. 16	20. 15	17. 52	·0920					
20. 27	18. 50	20. 53	·0906					
20. 42	20. 20	21. 42	·0897					
20. 54	19. 10	21. 49	·0899					
	***	22. 26	·0889					
21. 53	20. 25	22. 43	·0894					
	***	23. 13	·0885					
23. 15	28. 15	23. 32	·0878					
	***	23. 51	·0889					
23. 43	27. 50	23. 59	·0884					
23. 59	32. 15							
Mar. 14		Mar. 14				Mar. 14		
0. 0	21. 32. 15	0. 0	·0884			1. 0	58 ·0	
	***	0. 39	·0881			3. 0	59 ·0	
0. 47	36. 20	0. 51	·0887			9. 0	58 ·0	
	***	2. 46	·0889			21. 0	52 ·0	
2. 26	35. 20	4. 14	·0901					
	***	7. 4	·0909					
4. 45	29. 0	7. 21	·0907					
6. 20	26. 45	8. 41	·0912					
	***	9. 55	·0911					
9. 32	26. 5	10. 4	·0914					
10. 13	25. 30	13. 18	·0917					
11. 58	26. 0	14. 46	·0924					
12. 46	25. 30	15. 0	·0920					
13. 48	26. 35	16. 54	·0925					
14. 26	24. 45		***					
	***	18. 21	·0922					
15. 30	27. 0	18. 37	·0924					
	***	18. 45	·0922					
16. 32	26. 45	18. 56	·0925					
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 14		Mar. 14						
h m	° ′ ″	h m		h m		h m	°	°
17. 15	21. 23. 55	20. 24	·0917					
	***	20. 52	·0904					
18. 33	24. 10	21. 30	·0888					
18. 45	22. 5	22. 18	·0883					
18. 52	23. 35	22. 41	·0889					
19. 0	22. 5	22. 56	·0886					
19. 7	24. 0	23. 42	·0889					
19. 23	22. 0	23. 59	·0880					
19. 32	23. 25							
	***							
20. 4	21. 0							
20. 15	21. 30							
20. 26	20. 25							
20. 41	23. 50							
20. 47	22. 55							
21. 24	26. 30							
22. 3	27. 50							
22. 15	26. 30							
22. 42	29. 20							
22. 57	29. 25							
23. 40	34. 30							
23. 59	33. 50							
Mar. 15		Mar. 15				Mar. 15		
0. 0	21. 33. 50	0. 0	·0880			1. 0	54 ·0	
0. 15	33. 25	0. 13	·0877			3. 0	56 ·0	
0. 56	38. 20	1. 0	·0894			9. 0	53 ·7	
1. 37	34. 55	1. 40	·0875			21. 0	48 ·2	
1. 54	35. 45	2. 17	·0889					
	***	3. 28	·0897					
3. 8	33. 15	3. 45	·0895					
3. 27	33. 50	4. 40	·0900					
3. 45	31. 30	4. 51	·0899					
	***	7. 0	·0911					
4. 30	30. 0	8. 6	·0911					
5. 36	26. 30	8. 26	·0914					
9. 39	24. 25	8. 45	·0909					
10. 17	26. 20	9. 0	·0919					
13. 15	26. 5	9. 31	·0908					
	***	10. 27	·0915					
18. 14	23. 20		***					
18. 41	21. 45	14. 52	·0923					
	***	15. 11	·0921					
19. 42	25. 30	16. 30	·0930					
	***	18. 4	·0930					
20. 7	22. 0	18. 44	·0935					
	***	19. 31	·0927					
20. 48	24. 10	19. 50	·0931					
21. 6	29. 0		***					
21. 27	26. 0	20. 55	·0910					
21. 36	27. 30	21. 5	·0912					
21. 48	26. 50	21. 51	·0906					
	***	23. 11	·0882					
22. 43	32. 40	23. 40	·0888					
22. 51	35. 0	23. 59	·0901					
	***							
23. 42	34. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 15								
h m	° ′ ″	h m		h m		h m	°	°
23. 50	21. 40. 5							
23. 59	38. 10							
Mar. 16		Mar. 16				Mar. 16		
0. 0	21. 38. 10	0. 0	·0901			1. 0	53·0	
0. 15	32. 20	0. 22	·0877			3. 0	56·0	
0. 31	31. 35	0. 57	·0887			9. 0	57·0	
1. 17	35. 40	2. 12	·0890			21. 0	52·0	
	***	2. 22	·0895					
2. 12	34. 15		***					
2. 20	35. 50	3. 47	·0889					
2. 48	36. 35	4. 4	·0867					
3. 0	34. 10	4. 21	·0883					
	***		***					
3. 42	34. 10	5. 0	·0897					
3. 53	29. 20	5. 21	·0895					
	***	5. 40	·0882					
4. 10	28. 30	6. 7	·0892					
4. 15	30. 0	6. 12	·0898					
5. 12	25. 0	6. 22	·0891					
5. 18	25. 55	6. 45	·0897					
5. 37	23. 50	6. 51	·0896					
	***	7. 12	·0904					
7. 9	25. 30	7. 18	·0900					
7. 26	20. 10		***					
7. 41	12. 30	7. 41	·0897					
7. 50	18. 5	7. 52	·0907					
8. 5	15. 45	8. 6	·0900					
8. 16	15. 30	8. 27	·0911					
8. 26	19. 0	8. 44	·0903					
8. 42	16. 30	8. 49	·0909					
8. 48	21. 40	9. 13	·0896					
	***	9. 41	·0904					
9. 40	18. 45	9. 46	·0897					
	***		***					
9. 57	19. 0	10. 22	·0901					
	***	10. 42	·0907					
11. 43	28. 30		***					
11. 57	23. 50	11. 11	·0905					
	***	11. 30	·0909					
13. 3	23. 0	11. 58	·0922					
13. 50	31. 0	12. 30	·0907					
14. 6	29. 30	12. 48	·0916					
14. 38	35. 5	12. 55	·0910					
15. 10	28. 20	13. 9	·0913					
15. 15	29. 0	13. 25	·0914					
15. 32	23. 0	14. 4	·0916					
15. 45	23. 0	14. 21	·0922					
	***	14. 52	·0925					
16. 15	32. 30	15. 6	·0915					
16. 29	30. 0	15. 16	·0924					
16. 38	31. 20		***					
16. 46	28. 0	15. 45	·0902					
17. 0	29. 0	16. 1	·0900					
	***	16. 11	·0889					
17. 42	24. 45	16. 32	·0895					
17. 50	26. 30	16. 43	·0893					
18. 3	25. 25	17. 13	·0904					
	***		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 16		Mar. 16						
h m	° ′ ″	h m		h m		h m	°	°
19. 15	21. 23. 25	17. 41	·0905					
19. 20	21. 30	17. 49	·0910					
19. 33	23. 35	17. 58	·0903					
	***		***					
20. 6	23. 35	18. 19	·0905					
20. 13	21. 30		***					
20. 18	23. 30	19. 16	·0899					
	***	19. 30	·0906					
20. 37	23. 25		***					
20. 42	25. 30	20. 9	·0899					
20. 45	22. 30		***					
	***	20. 36	·0899					
21. 30	26. 30		***					
	***	21. 0	·0889					
21. 52	25. 25	21. 21	·0892					
	***		***					
22. 46	29. 50	21. 45	·0882					
22. 50	28. 0		***					
	***	22. 17	·0886					
23. 15	31. 45	22. 45	·0885					
23. 22	30. 15	22. 49	·0877					
	***	22. 59	·0887					
23. 59	33. 30	23. 3	·0881					
		23. 10	·0886					
			***					
		23. 23	·0882					
		23. 55	·0889					
		23. 59	·0887					
Mar. 17		Mar. 17				Mar. 17		
0. 0	21. 33. 30	0. 0	·0887			1. 0	54·0	
	***	0. 14	·0891			3. 0	56·0	
0. 46	33. 50		***			9. 0	55·8	
1. 8	35. 15	0. 51	·0883			21. 0	49·8	
1. 37	33. 30	1. 13	·0896					
	***	1. 33	·0893					
2. 20	35. 5	1. 51	·0902					
	***	2. 5	·0897					
2. 44	31. 35	2. 22	·0903					
2. 56	32. 20	2. 36	·0901					
	***	2. 43	·0897					
3. 25	30. 0	2. 54	·0904					
	***	3. 11	·0894					
3. 42	25. 30		***					
	***	3. 30	·0893					
4. 18	28. 0	3. 46	·0905					
	***	4. 13	·0891					
5. 32	23. 20	4. 36	·0895					
5. 48	24. 30	4. 51	·0881					
6. 6	23. 25	5. 11	·0893					
6. 30	24. 20	5. 30	·0884					
7. 7	20. 35	5. 44	·0887					
7. 28	22. 30	6. 1	·0884					
	***	6. 15	·0891					
9. 17	24. 30	6. 58	·0890					
9. 36	21. 35	7. 18	·0901					
9. 47	23. 20	7. 30	·0898					
10. 15	23. 10	7. 41	·0902					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.17		Mar.17						
h m	° ′ ″	h m		h m		h m	°	°
10.52	21.24.30	8. 1	·0897					
11.13	23. 0	8.45	·0897					
11.26	20.15	8.58	·0905					
12. 0	25.20	10.13	·0903					
12.37	23.35	11.11	·0907					
	***	11.33	·0915					
13.58	24.30	12.13	·0905					
14. 8	26.25	12.22	·0908					
	***	12.39	·0904					
14.48	25. 0	12.44	·0907					
	***		***					
15.30	31.45	13.30	·0904					
	***	13.42	·0907					
16.15	25.20	14.11	·0905					
	***	14.21	·0910					
18. 4	22.30	14.28	·0908					
	***	14.47	·0912					
18.13	26. 0	14.57	·0907					
	***	15.14	·0909					
18.50	28.30	15.20	·0907					
19. 7	33.25	15.38	·0910					
	***	16. 2	·0907					
19.56	21.45	16.33	·0910					
20.11	23.40	17. 9	·0907					
20.17	21.30	17.17	·0911					
20.30	21.40	17.43	·0911					
20.42	20. 0	17.58	·0917					
20.45	22.30	18.55	·0900					
21. 0	21. 0	19.12	·0908					
	***	19.15	·0903					
21.37	23.20		***					
	***	19.44	·0903					
22. 7	27.35	20. 7	·0911					
	***		***					
23.59	35.40	21.41	·0891					
			***					
		21.52	·0895					
		23. 4	·0880					
		23.23	·0877					
		23.59	·0873					
Mar.18		Mar.18				Mar.18		
0. 0	21.35.40	0. 0	·0873			1. 0	53·5	
0. 8	37. 0		***			3. 0	56·4	
	***	1.57	·0876			9. 0	56·5	
2.14	33.15	2.13	·0879			21. 0	46·8	
	***	2.22	·0873					
4. 4	25.20	2.34	·0874					
	***	2.47	·0869					
5.18	24.30	2.56	·0870					
	***	3. 9	·0867					
6. 8	22.25	3.43	·0872					
6.17	20.30	3.52	·0867					
	***	4.38	·0872					
7. 5	23.15	4.59	·0881					
7.16	21.50	5.52	·0879					
	***	6.14	·0873					
8.17	25. 0	6.35	·0879					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.18		Mar.18						
h m	° ′ ″	h m		h m		h m	°	°
9.15	21.23.20	6.54	·0873					
9.56	15.50	7.11	·0877					
10.28	23. 0	7.26	·0886					
10.36	23. 0	8. 0	·0886					
10.47	25.30	8.16	·0890					
11. 6	24.20	9.23	·0885					
	***	9.43	·0879					
12.45	26.30	10.14	·0896					
	***	10.27	·0891					
15.12	27.25	10.36	·0893					
15.50	30.50	10.53	·0885					
16.45	23.10	11.12	·0891					
16.55	25.30	12.40	·0896					
17. 2	23. 0		***					
17.15	24.45	15.39	·0900					
	***	16. 9	·0905					
17.46	23. 5	16.37	·0905					
17.57	24.10	17.53	·0911					
18. 7	22.30	18. 4	·0907					
	***		***					
18.28	23.30	20. 4	·0901					
	***	23.11	·0877					
19.54	20.35	23.59	·0876					
20.43	21. 5							
22. 0	26.15							
23.59	31.25							
Mar.19		Mar.19				Mar.19		
0. 0	21.31.25	0. 0	·0876			1. 0	52·0	
0.47	33.20	1.10	·0877			3. 0	55·2	
1.32	33.45	1.38	·0882			9. 0	55·8	
3.15	30.25	3.19	·0886			22.15	48·0	
4.35	27. 5	3.59	·0881					
5.45	25. 0	5.37	·0885					
7.18	25.25	6.21	·0889					
8. 7	24.30	6.38	·0889					
10.59	23.45	7.21	·0895					
11.27	25.10	8. 7	·0893					
11.46	24. 0	8.22	·0896					
	***	11.34	·0903					
18.26	23.30	12. 0	·0900					
20. 9	19.50	18.25	·0912					
	***	19.57	·0910					
21. 4	20.35	21. 0	·0903					
	***	21.10	·0905					
23.59	34.25	21.30	·0896					
		22.36	·0887					
		23.59	·0887					
Mar.20		Mar.20				Mar.20		
0. 0	21.34.25	0. 0	·0887			7.11	54·0	
1.20	35.20	2. 0	·0897			21. 0	50·0	
2.27	33.50	2.11	·0901					
4.30	28.30	5.14	·0906					
7.45	24.35	9.11	·0917					
18.25:	24.45	10. 0	·0915					
20.50	20.25	10.15	·0917					
21.48	23.30	14.49	·0921					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. of H. F. Magnet.	Readings of Thermometers. of V. F. Magnet.
Mar.20		Mar.20						
h m	° ′ ″	h m		h m		h m	°	
23. 59	21. 35. 30	15. 37	·0925					
		19. 2	·0931					
		19. 30	·0920					
		21. 55	·0897					
		22. 24	·0895					
		23. 31	·0883					
		23. 59	·0887					
Mar.21		Mar.21				Mar.21		
0. 0	21. 35. 30	0. 0	·0887			1. 0	52·2	
	***	0. 15	·0883			3. 0	54·0	
2. 14	37. 45	0. 45	·0890			9. 0	54·0	
3. 27	34. 10	1. 13	·0889			21. 0	45·0	
3. 38	33. 5	2. 10	·0897					
	***	3. 7	·0896					
5. 9	28. 10	3. 43	·0888					
5. 45	25. 0	4. 46	·0890					
6. 30	24. 25	5. 9	·0896					
6. 48	25. 30	5. 41	·0885					
7. 9	22. 0	6. 54	·0898					
7. 28	13. 35	7. 13	·0892					
7. 45	21. 30	7. 39	·0913					
7. 58	18. 30	7. 49	·0897					
8. 15	20. 40	8. 0	·0902					
8. 44	20. 25	8. 14	·0896					
9. 3	22. 35	8. 46	·0900					
9. 40	19. 45	9. 22	·0896					
	***		***					
11. 13	22. 25	11. 51	·0905					
11. 30	21. 15	12. 21	·0909					
11. 55	21. 20	12. 43	·0905					
12. 25	18. 5	12. 59	·0907					
15. 3	23. 30	13. 16	·0902					
15. 26	21. 30		***					
15. 40	22. 0	15. 54	·0915					
16. 15	30. 55	16. 1	·0912					
16. 46	25. 25	16. 29	·0926					
17. 18	21. 15	17. 5	·0931					
	***	17. 40	·0918					
17. 56	23. 30	17. 54	·0916					
	***	18. 27	·0925					
19. 0	21. 50	19. 0	·0927					
19. 4	24. 0	19. 11	·0921					
19. 11	22. 10		***					
19. 17	23. 35	22. 0	·0895					
	***	22. 6	·0888					
19. 52	20. 10		***					
	***	22. 52	·0881					
20. 50	20. 25	23. 4	·0883					
	***		***					
22. 37	25. 40	23. 31	·0879					
	***	23. 59	·0882					
23. 59	32. 0							
Mar.22		Mar.22				Mar.22		
0. 0	21. 32. 0	0. 0	·0882			1. 0	49·0	
1. 11	34. 35	0. 45	·0883			3. 0	52·7	
5. 33	23. 25	1. 42	·0880			9. 0	53·5	

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. of H. F. Magnet.	Readings of Thermometers. of V. F. Magnet.
Mar.22		Mar.22				Mar.22		
h m	° ′ ″	h m		h m		h m	°	
5. 56	21. 24. 20	2. 13	·0885			21. 0	49·0	
6. 25	21. 50	3. 15	·0882					
7. 24	24. 30	4. 26	·0895					
8. 57	24. 15	5. 13	·0893					
9. 15	22. 20	5. 42	·0897					
10. 43	25. 0	6. 16	·0889					
15. 41	25. 25	6. 53	·0900					
16. 2	26. 30	7. 41	·0905					
18. 26	23. 30	8. 58	·0901					
	***	9. 15	·0905					
20. 30	18. 25	9. 43	·0901					
21. 3	20. 10		***					
21. 25	20. 20	13. 26	·0911					
23. 59	31. 30	14. 28	·0911					
		18. 15	·0921					
		22. 45	·0895					
		23. 21	·0898					
		23. 59	·0894					
Mar.23		Mar.23				Mar.23		
0. 0	21. 31. 30	0. 0	·0894			1. 0	53·0	
0. 50	34. 15		***			3. 0	54·8	
2. 46	34. 25	2. 57	·0908			9. 0	54·2	
4. 40	29. 40		***			21. 0	51·5	
5. 39	27. 55	6. 30	·0906					
9. 33	26. 0	7. 0	·0911					
11. 56	25. 30	7. 26	·0909					
12. 28	24. 25	7. 53	·0911					
14. 34	25. 55	8. 7	·0909					
15. 27	25. 0	10. 17	·0917					
15. 50	27. 30		***					
16. 18	22. 35	11. 48	·0916					
16. 42	21. 5	12. 12	·0920					
17. 0	25. 0	12. 22	·0915					
	***		***					
17. 56	27. 50	13. 46	·0914					
	***	16. 15	·0926					
18. 30	31. 0	16. 35	·0922					
	***	17. 4	·0927					
19. 7	29. 45	17. 54	·0909					
19. 18	32. 10	19. 9	·0904					
19. 40	28. 20	19. 32	·0921					
20. 15	23. 25	20. 13	·0905					
20. 24	23. 25	20. 35	·0902					
20. 42	21. 20	21. 3	·0906					
21. 26	23. 40	21. 40	·0893					
22. 8	24. 25	22. 14	·0889					
22. 52	31. 0	22. 28	·0894					
23. 15	32. 40	23. 25	·0876					
23. 29	34. 45	23. 36	·0877					
23. 40	34. 30	23. 45	·0872					
23. 48	36. 25	23. 59	·0876					
23. 59	35. 35							
Mar.24		Mar.24				Mar.24		
0. 0	21. 35. 35	0. 0	·0876			1. 0	54·8	
0. 10	35. 20	0. 28	·0881			3. 0	55·7	
0. 17	37. 0	0. 45	·0893			9. 0	57·0	
	***							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.24		Mar.24				Mar.24		
h m	° ′ ″	h m		h m		h m	°	°
1. 30	21. 38. 30	0. 53	·0887			21. 0	53·2	
	***	1. 27	·0896					
3. 12	33. 30	2. 43	·0877					
3. 20	34. 15	2. 59	·0881					
3. 58	31. 0	3. 10	·0880					
5. 1	26. 10	3. 30	·0887					
5. 40	26. 20	3. 51	·0882					
5. 59	21. 30	4. 36	·0897					
6. 7	17. 35	4. 59	·0897					
6. 15	18. 0	5. 41	·0904					
6. 33	15. 55	6. 11	·0888					
6. 44	16. 30	6. 15	·0894					
6. 53	15. 35	6. 22	·0891					
	***	6. 41	·0895					
8. 2	23. 25	6. 48	·0894					
8. 30	26. 0	6. 57	·0901					
9. 33	24. 50	7. 15	·0890					
9. 46	22. 25	7. 31	·0897					
10. 4	23. 50	7. 41	·0889					
10. 42	22. 10	7. 46	·0897					
12. 20	23. 50	7. 55	·0886					
12. 45	25. 35	8. 10	·0896					
13. 30	23. 50	9. 30	·0896					
13. 56	26. 5	10. 43	·0909					
14. 42	22. 30	11. 27	·0891					
14. 50	22. 40	11. 44	·0896					
15. 12	21. 50	12. 12	·0891					
15. 20	22. 45	12. 43	·0894					
	***	12. 53	·0891					
17. 28	21. 40	13. 21	·0897					
17. 43	22. 20	13. 48	·0896					
19. 58	20. 30	14. 30	·0900					
20. 40	21. 35	14. 45	·0896					
21. 19	21. 45	16. 53	·0900					
21. 42	24. 25	17. 32	·0903					
22. 50	29. 20	19. 16	·0895					
23. 15	34. 10	19. 42	·0896					
23. 32	35. 25	21. 40	·0890					
23. 59	34. 50	22. 12	·0885					
		23. 19	·0896					
		23. 59	·0891					
Mar.25		Mar.25				Mar.25		
0. 0	21. 34. 50	0. 0	·0891			1. 0	55·8	
0. 29	36. 20	0. 35	·0901			3. 0	58·0	
1. 9	35. 50	0. 54	·0894			9. 0	58·0	
2. 33	37. 10	1. 21	·0892			21. 0	53·0	
3. 2	36. 0	1. 59	·0898					
3. 43	32. 20	2. 14	·0897					
3. 57	32. 5	2. 36	·0900					
4. 15	30. 30	3. 14	·0899					
4. 47	29. 25	3. 54	·0887					
5. 38	29. 35	4. 21	·0890					
6. 12	25. 40	4. 29	·0886					
6. 45	27. 55	4. 53	·0883					
7. 30	27. 20	5. 36	·0895					
7. 47	25. 40	5. 59	·0881					
8. 0	26. 5	6. 14	·0879					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.25		Mar.25						
h m	° ′ ″	h m		h m		h m	°	°
8. 13	21. 25. 25	6. 28	·0889					
8. 40	27. 45	6. 45	·0893					
9. 10	21. 20	7. 0	·0890					
9. 23	22. 50	7. 36	·0900					
9. 42	18. 20	8. 14	·0895					
10. 4	21. 30	9. 15	·0895					
	***	9. 30	·0884					
10. 45	23. 15	9. 52	·0893					
	***	10. 13	·0885					
11. 26	21. 20		***					
11. 40	21. 50	12. 13	·0891					
11. 48	20. 30	12. 57	·0887					
12. 27	19. 40	13. 17	·0910					
12. 54	21. 0	13. 38	·0903					
13. 15	25. 50	14. 0	·0907					
13. 50	15. 35	14. 23	·0903					
14. 29	20. 30	14. 44	·0896					
14. 45	17. 55	14. 59	·0902					
15. 15	19. 5	15. 28	·0895					
15. 40	22. 15		***					
17. 13	19. 30	16. 52	·0904					
17. 50	22. 0	17. 9	·0901					
	***	17. 45	·0907					
18. 30	20. 0	18. 13	·0899					
	***	18. 18	·0901					
19. 36	22. 50	18. 29	·0899					
19. 52	20. 35	19. 9	·0903					
20. 14	21. 40	20. 29	·0882					
20. 23	20. 35	20. 44	·0884					
20. 54	21. 50	21. 25	·0871					
21. 53	32. 0		***					
22. 3	31. 15	22. 5	·0866					
22. 14	32. 30	23. 46	·0877					
23. 7	32. 25	23. 7	·0874					
23. 29	34. 35	23. 59	·0884					
23. 42	33. 45							
	***							
23. 59	36. 15							
Mar.26		Mar.26				Mar.26		
0. 0	21. 36. 15	0. 0	·0884			1. 0	55·5	
0. 15	34. 35	0. 17	·0877			3. 0	57·5	
1. 16	37. 30	0. 43	·0883			9. 0	58·0	
1. 25	36. 25	1. 14	·0881			22. 25	54·0	
1. 50	38. 40	2. 0	·0875					
3. 9	36. 45	2. 22	·0878					
3. 20	34. 40	3. 9	·0894					
3. 45	33. 50	3. 22	·0886					
3. 56	36. 25	3. 43	·0888					
4. 5	34. 35	4. 0	·0910					
4. 20	30. 0	4. 15	·0895					
4. 45	28. 15	4. 22	·0897					
4. 58	30. 20	4. 42	·0891					
5. 37	30. 5	4. 56	·0899					
5. 48	28. 10	5. 1	·0897					
6. 11	29. 0	5. 15	·0900					
6. 38	26. 45	5. 43	·0891					
6. 56	28. 40	6. 13	·0900					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar.26		Mar.26						
h m	° ′ ″	h m		h m				
7. 30	21. 23. 55	6. 30	·0892					
7. 42	25. 50	6. 58	·0895					
8. 7	25. 0	7. 18	·0887					
8. 30	22. 30	7. 31	·0891					
8. 48	25. 0	7. 52	·0887					
8. 59	24. 30	8. 10	·0880					
9. 15	23. 20	8. 26	·0878					
9. 35	23. 35	8. 43	·0886					
9. 50	16. 20	9. 10	·0879					
10. 8	26. 0	9. 39	·0890					
10. 27	21. 40	9. 45	·0885					
10. 42	10. 35	9. 52	·0899					
10. 48	20. 25	10. 0	·0889					
10. 57	17. 0	10. 14	·0906					
11. 4	19. 45	10. 22	·0915					
11. 20	13. 15	10. 33	·0896					
11. 27	15. 0	10. 45	·0908					
11. 33	13. 40	10. 58	·0875					
11. 56	16. 5	11. 11	·0859					
	***	11. 28	·0870					
12. 30	17. 10		***					
12. 52	9. 30	12. 13	·0865					
13. 0	10. 35	12. 26	·0871					
13. 14	9. 20	12. 46	·0900					
13. 19	11. 5	12. 58	·0891					
13. 32	16. 50	13. 13	·0878					
13. 45	15. 45	13. 52	·0887					
13. 57	16. 20	14. 22	·0879					
14. 30	12. 15	14. 53	·0891					
14. 45	15. 55	15. 28	·0892					
15. 7	17. 45	15. 39	·0886					
15. 26	17. 45	15. 45	·0891					
15. 30	16. 30	16. 2	·0889					
15. 44	17. 20	16. 12	·0893					
15. 50	16. 30	16. 45	·0884					
16. 13	19. 35		***					
16. 30	19. 10	17. 15	·0897					
	***	17. 22	·0894					
16. 53	23. 55	17. 36	·0903					
17. 0	23. 25	17. 52	·0907					
	***	18. 2	·0899					
17. 28	26. 15	18. 19	·0896					
17. 34	23. 40	18. 39	·0884					
17. 45	23. 20	18. 58	·0877					
17. 52	22. 0	19. 22	·0885					
18. 3	23. 50		***					
18. 12	23. 20	20. 13	·0886					
18. 16	24. 20		***					
18. 23	23. 10	20. 40	·0881					
18. 32	23. 35		***					
18. 36	26. 5	21. 26	·0889					
18. 42	24. 0		***					
18. 50	23. 30	22. 8	·0876					
	***	22. 46	·0878					
19. 2	27. 40	23. 3	·0887					
	***	23. 22	·0881					
19. 20	26. 10	23. 52	·0885					
	***	23. 59	·0889					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar.26								
h m	° ′ ″							
19. 42	21. 28. 50							
20. 4	27. 30							
20. 12	28. 30							
20. 27	27. 20							
20. 34	27. 35							
20. 50	26. 25							
	***							
21. 48	29. 45							
22. 7	31. 0							
	***							
22. 45	31. 30							
22. 58	33. 5							
23. 29	31. 25							
23. 40	32. 0							
23. 45	33. 10							
23. 50	32. 30							
23. 59	36. 35							
Mar.27		Mar.27				Mar.27		
0. 0	21. 36. 35	0. 0	·0890			6. 25	55·5	
0. 12	38. 20	0. 13	·0897			21. 3	52·5	
0. 30	35. 45	0. 28	·0885					
0. 44	38. 0	0. 43	·0887					
0. 50	36. 20	0. 50	·0882					
1. 10	38. 45	1. 10	·0888					
1. 21	38. 0	1. 30	·0874					
1. 32	38. 20	1. 52	·0877					
1. 56	35. 30	2. 10	·0899					
2. 12	37. 40	2. 14	·0898					
2. 45	37. 45		***					
	***	2. 48	·0910					
3. 26	33. 10	3. 22	·0904					
3. 34	33. 30	3. 38	·0913					
3. 45	32. 20	3. 55	·0910					
4. 11	33. 0	4. 30	·0895					
4. 36	31. 0	4. 45	·0902					
4. 43	31. 35	4. 57	·0894					
5. 0	29. 50	5. 11	·0892					
5. 20	27. 50	5. 44	·0903					
5. 50	27. 0	6. 0	·0898					
6. 15	22. 45	6. 23	·0912					
6. 58	26. 55	7. 18	·0905					
	***	7. 28	·0909					
8. 30	28. 10	7. 41	·0905					
9. 40	27. 30	8. 45	·0906					
9. 47	18. 15	9. 42	·0910					
10. 3	20. 30	9. 59	·0935					
10. 15	17. 20	10. 9	·0918					
10. 19	19. 0	10. 15	·0924					
11. 0	12. 30	10. 22	·0913					
11. 7	21. 0	10. 38	·0920					
11. 32	27. 0	10. 46	·0926					
11. 50	19. 30	11. 35	·0881					
12. 15	20. 20	11. 52	·0895					
12. 45	15. 0	12. 15	·0896					
13. 8	18. 20	12. 32	·0904					
13. 20	17. 45	13. 15	·0895					
13. 34	20. 40	13. 33	·0900					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 27		Mar. 27						
h m	° ′ ″	h m		h m		h m	°	°
14. 12	21. 23. 15	13. 39	·0899					
14. 30	22. 55	13. 55	·0905					
14. 43	23. 0	14. 19	·0902					
14. 57	21. 30	14. 30	·0907					
15. 15	22. 0	15. 28	·0911					
15. 42	17. 50	16. 7	·0904					
16. 0	17. 10	16. 15	·0904					
16. 8	21. 10	16. 32	·0892					
16. 17	21. 10	17. 10	·0908					
16. 42	24. 0	17. 44	·0912					
16. 53	23. 0	18. 7	·0904					
16. 56	24. 40	18. 15	·0906					
17. 7	24. 30	18. 28	·0899					
17. 18	26. 30	18. 54	·0905					
18. 3	24. 45	19. 33	·0897					
18. 17	22. 30	19. 45	·0899					
18. 26	23. 20	20. 31	·0889					
18. 45	21. 5	21. 4	·0875					
19. 6	23. 0		***					
19. 32	23. 0	23. 59	·0881					
19. 45	21. 10							
	***							
21. 0	23. 35							
	***							
22. 9	28. 40							
22. 23	27. 40							
22. 30	29. 0							
22. 35	28. 30							
22. 45	31. 0							
23. 0	30. 40							
23. 30	32. 0							
	***							
23. 38	32. 25							
23. 59	37. 10							
Mar. 28		Mar. 28				Mar. 28		
0. 0	21. 37. 10	0. 0	·0881			1. 0	55·0	
	***	0. 30	·0869			3. 0	57·2	
1. 4	34. 50	0. 58	·0869			9. 0	57·0	
1. 45	37. 0	1. 57	·0882			21. 0	52·5	
	***	2. 45	·0885					
2. 30	33. 30	2. 58	·0890					
	***	3. 12	·0882					
2. 56	33. 30	3. 30	·0892					
3. 5	31. 35	3. 38	·0888					
3. 27	30. 30	3. 56	·0895					
3. 40	29. 0		***					
3. 55	29. 30	5. 13	·0897					
	***	5. 23	·0894					
4. 56	26. 20	5. 42	·0895					
	***	5. 53	·0901					
5. 17	24. 30	6. 56	·0897					
	***	7. 42	·0903					
8. 15	27. 15	8. 0	·0900					
8. 46	23. 35	8. 16	·0904					
9. 0	23. 35	8. 37	·0898					
9. 37	19. 40	8. 46	·0900					
	***	9. 7	·0895					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 28		Mar. 28						
h m	° ′ ″	h m		h m		h m	°	°
10. 12	21. 23. 50	10. 10	·0892					
10. 27	24. 30	10. 21	·0897					
10. 56	20. 40	10. 51	·0899					
11. 8	23. 0	11. 13	·0893					
11. 28	22. 0	11. 44	·0907					
11. 40	26. 0	12. 11	·0913					
11. 50	26. 0	12. 29	·0904					
12. 6	29. 5	12. 59	·0911					
12. 36	25. 20	13. 42	·0910					
13. 4	28. 30	14. 36	·0913					
13. 42	26. 20	15. 14	·0907					
14. 3	26. 20		***					
14. 45	22. 30	16. 57	·0911					
15. 18	25. 15	17. 37	·0905					
	***	18. 42	·0915					
16. 57	22. 40	19. 58	·0909					
	***	20. 30	·0900					
18. 2	26. 10	20. 46	·0903					
	***	21. 4	·0895					
19. 40	23. 35	21. 27	·0897					
20. 0	27. 0	21. 54	·0891					
	***	22. 10	·0880					
20. 42	22. 15	22. 42	·0885					
	***	23. 15	·0883					
22. 18	28. 35	23. 50	·0875					
	***	23. 59	·0877					
23. 22	34. 40							
23. 45	34. 30							
23. 59	36. 10							
Mar. 29		Mar. 29				Mar. 29		
0. 0	21. 36. 10	0. 0	·0878			1. 0	56·4	
	***	0. 12	·0883			3. 0	59·0	
0. 56	37. 5	0. 44	·0877			9. 0	58·0	
1. 15	34. 50	0. 52	·0885			21. 0	49·5	
1. 33	34. 30	1. 0	·0878					
1. 45	33. 0	1. 5	·0883					
1. 53	34. 40	1. 28	·0872					
2. 7	34. 0	1. 46	·0873					
2. 32	37. 5	1. 59	·0879					
2. 58	33. 0	2. 12	·0878					
3. 42	33. 15	2. 43	·0903					
4. 10	30. 30	3. 7	·0887					
4. 15	31. 0	3. 41	·0897					
4. 32	25. 30		***					
4. 56	27. 30	4. 28	·0901					
5. 16	26. 20	4. 42	·0895					
5. 30	27. 45	4. 58	·0899					
5. 52	25. 50	5. 18	·0891					
6. 41	25. 50	5. 36	·0895					
6. 52	26. 0	5. 46	·0888					
7. 6	24. 50	6. 0	·0887					
8. 30	26. 0	6. 15	·0892					
9. 3	23. 30	6. 28	·0891					
9. 12	23. 40	7. 3	·0904					
9. 30	18. 0	7. 33	·0905					
9. 50	26. 15	7. 45	·0899					
10. 6	15. 0	8. 16	·0900					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 29		Mar. 29						
h m	° ′ ″	h m		h m		h m		
10. 41	21. 22. 5	8. 32	·0905					
10. 53	21. 55	8. 46	·0901					
11. 11	23. 30	9. 12	·0926					
11. 27	23. 45	9. 28	·0913					
11. 38	21. 30	9. 43	·0925					
11. 48	22. 30	10. 5	·0887					
12. 2	16. 0	10. 30	·0903					
12. 11	17. 10	10. 55	·0897					
12. 39	14. 35	11. 17	·0899					
	***	11. 57	·0923					
14. 9	22. 0	12. 12	·0911					
14. 30	21. 40	12. 30	·0905					
14. 46	26. 5	12. 44	·0909					
16. 7	15. 10	13. 16	·0895					
16. 45	17. 40	13. 42	·0900					
17. 0	16. 35	14. 10	·0899					
17. 37	20. 25	14. 21	·0891					
17. 48	19. 30	14. 50	·0891					
	***	15. 21	·0917					
18. 40	25. 45	15. 41	·0921					
19. 8	23. 15	16. 22	·0906					
19. 15	24. 40	16. 53	·0912					
19. 25	22. 50	17. 14	·0910					
	***	17. 44	·0903					
19. 47	23. 5	18. 0	·0906					
20. 0	25. 0	18. 22	·0893					
20. 9	22. 30	18. 53	·0908					
	***	19. 43	·0913					
21. 10	23. 10		***					
	***	20. 46	·0905					
22. 40	27. 15	21. 0	·0897					
	***	21. 8	·0907					
23. 15	31. 25	21. 45	·0895					
23. 23	30. 20		***					
23. 37	32. 35	22. 22	·0891					
23. 52	32. 30	22. 51	·0890					
23. 59	34. 0	23. 2	·0898					
		23. 14	·0899					
		23. 22	·0891					
		23. 42	·0898					
		23. 55	·0896					
		23. 59	·0893					
Mar. 30		Mar. 30				Mar. 30		
0. 0	21. 34. 0	0. 0	·0893			1. 0	51·0	
	***	0. 19	·0882			3. 0	52·0	
0. 45	33. 35	0. 42	·0887			9. 0	47·2	
	***	1. 35	·0904			21. 6	41·0	
1. 20	37. 25	1. 43	·0901					
	***		***					
2. 25	35. 20	2. 50	·0901					
	***		***					
3. 18	37. 20	3. 21	·0911					
3. 29	35. 40	3. 29	·0905					
3. 42	37. 45	3. 44	·0911					
	***	3. 52	·0908					
4. 6	33. 40	4. 12	·0923					
4. 18	26. 0	4. 36	·0952					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 30		Mar. 30						
h m	° ′ ″	h m		h m		h m		
4. 45	21. 31. 30	4. 51	·0927					
4. 51	29. 30	5. 4	·0916					
5. 6	32. 0	5. 12	·0907					
5. 25	27. 25	5. 31	·0929					
5. 32	29. 15	5. 44	·0914					
5. 40	27. 30	5. 53	·0932					
5. 48	22. 30	5. 57	·0927					
6. 0	19. 5	6. 2	·0932					
6. 12	15. 50	6. 12	·0921					
6. 17	21. 35	6. 16	·0936					
6. 28	20. 50	6. 26	·0920					
6. 42	25. 0	6. 36	·0920					
6. 47	24. 5	6. 42	·0914					
7. 3	25. 40	6. 53	·0918					
7. 15	24. 10	7. 7	·0914					
7. 30	28. 5	7. 22	·0919					
7. 46	24. 45	7. 38	·0911					
8. 12	27. 30	7. 56	·0914					
8. 25	25. 30	8. 17	·0905					
8. 56	26. 15	8. 27	·0909					
9. 3	30. 0	8. 38	·0907					
9. 11	24. 5	8. 56	·0918					
9. 20	22. 30	9. 13	·0898					
9. 40	31. 35	9. 37	·0917					
9. 52	23. 10	9. 52	·0900					
10. 3	26. 30	10. 7	·0913					
10. 28	32. 0	10. 13	·0911					
10. 43	28. 15	10. 28	·0932					
10. 52	29. 5	10. 43	·0912					
11. 45	22. 30	10. 52	·0918					
12. 8	26. 50	11. 11	·0917					
12. 17	26. 20	11. 22	·0927					
12. 30	28. 25		***					
12. 56	26. 40	12. 11	·0931					
13. 15	23. 20	12. 19	·0927					
13. 47	31. 15	13. 12	·0928					
	***	13. 27	·0923					
14. 40	25. 45	14. 15	·0931					
14. 50	22. 5	15. 13	·0918					
	***	15. 27	·0925					
15. 15	19. 0	15. 53	·0924					
	***	16. 13	·0919					
15. 52	21. 40	16. 41	·0927					
16. 13	19. 55	16. 52	·0917					
16. 42	26. 20		***					
16. 50	25. 30	17. 30	·0924					
17. 4	26. 35	18. 3	·0917					
	***	18. 21	·0923					
17. 18	26. 25		***					
17. 27	28. 20	20. 30	·0918					
	***	21. 12	·0903					
17. 45	28. 5	21. 51	·0899					
17. 56	26. 0	22. 7	·0885					
18. 17	28. 10	22. 41	·0881					
18. 45	26. 30	22. 45	·0876					
18. 48	27. 5	22. 55	·0881					
	***		***					
19. 9	22. 30	23. 23	·0876					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 30		Mar. 30						
h m	° ′ ″	h m		h		h	°	°
19. 20	21. 25. 45	23. 59	·0881					
19. 47	23. 40							
19. 53	21. 30							
20. 0	24. 0							
20. 6	21. 10							
20. 15	23. 15							
20. 24	21. 45							
20. 50	25. 5							
20. 54	27. 40							
21. 15	25. 15							
22. 27	32. 35							
22. 45	32. 50							
22. 52	35. 40							
23. 4	36. 0							
23. 26	34. 10							
	***							
23. 59	36. 20							
Mar. 31		Mar. 31				Mar. 31		
0. 0	21. 36. 20	0. 0	·0881			1. 0	45·0	
0. 15	36. 0		***			3. 6	48·2	
0. 37	38. 45	0. 54	·0903			9. 0	49·0	
0. 57	36. 50	1. 14	·0901			21. 0	40·0	
2. 5	35. 25	2. 11	·0903					
3. 4	35. 5	3. 16	·0920					
3. 38	31. 15	3. 55	·0901					
4. 20	30. 55	4. 11	·0904					
6. 8	25. 30	4. 16	·0903					
6. 32	23. 0	4. 50	·0915					
6. 52	16. 55	5. 12	·0919					
7. 8	20. 35	5. 16	·0917					
7. 33	17. 50	5. 20	·0920					
8. 15	23. 5	5. 51	·0915					
9. 6	24. 0	6. 10	·0918					
9. 27	17. 10	6. 27	·0912					
10. 7	26. 15	6. 43	·0918					
10. 32	26. 15	6. 46	·0916					
11. 15	23. 25	7. 13	·0933					
	***	7. 24	·0921					
11. 45	25. 50	8. 0	·0927					
12. 13	29. 50	8. 40	·0913					
13. 6	27. 10	9. 4	·0921					
14. 2	28. 0	9. 25	·0915					
15. 18	26. 20	9. 36	·0924					
15. 40	27. 15	9. 54	·0930					
15. 54	26. 0	10. 15	·0919					
16. 15	27. 10	10. 30	·0917					
17. 3	25. 50		***					
17. 44	26. 40	10. 59	·0922					
18. 26	30. 0	11. 10	·0919					
18. 45	27. 30	11. 25	·0921					
	***	11. 42	·0917					
20. 32	21. 20	11. 51	·0923					
21. 27	25. 15	12. 1	·0923					
22. 17	34. 20	12. 12	·0930					
23. 0	35. 30	12. 22	·0923					
23. 26	35. 0	12. 53	·0930					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 31		Mar. 31						
h m	° ′ ″	h m		h m		h m	°	°
23. 45	21. 37. 0	13. 25	·0921					
23. 59	36. 0		***					
		17. 25	·0934					
		17. 50	·0923					
		18. 18	·0926					
		18. 30	·0923					
		19. 19	·0932					
		20. 30	·0922					
		21. 36	·0882					
		22. 10	·0889					
		22. 58	·0885					
		23. 28	·0896					
		23. 56	·0891					
			(†)					
Apr. 1		Apr. 1				Apr. 1		
0. 0	21. 36. 0	0. 0	·0886			1. 0	47·0	
	***	0. 14	·0897			3. 0	50·5	
0. 30	37. 25	0. 28	·0904			9. 0	51·0	
	***	0. 47	·0897			21. 0	47·0	
1. 10	37. 25	0. 56	·0898					
1. 15	38. 30	1. 11	·0896					
	***	1. 23	·0901					
2. 17	40. 0	1. 45	·0894					
	***	2. 0	·0897					
2. 45	35. 10	2. 7	·0893					
3. 12	38. 20	2. 14	·0896					
3. 42	30. 0	2. 44	·0885					
3. 54	30. 35	3. 10	·0894					
4. 3	27. 50	3. 16	·0890					
4. 18	27. 0	3. 24	·0895					
4. 40	27. 45	3. 28	·0890					
	***	3. 46	·0899					
5. 38	24. 0	3. 54	·0894					
6. 4	16. 30	4. 0	·0904					
	***	4. 13	·0905					
6. 17	16. 30	4. 28	·0913					
6. 33	21. 0	4. 40	·0908					
6. 50	13. 0	4. 50	·0905					
7. 4	22. 10	5. 20	·0910					
7. 18	22. 10	5. 36	·0905					
7. 43	16. 40	5. 48	·0891					
8. 0	21. 5	6. 0	·0903					
8. 37	20. 0	6. 11	·0900					
9. 3	22. 5	6. 22	·0910					
9. 50	21. 50	6. 35	·0903					
11. 42	24. 0	6. 49	·0934					
12. 8	24. 30	7. 15	·0901					
12. 17	22. 0	7. 38	·0915					
12. 47	22. 10	8. 3	·0905					
13. 26	21. 30	8. 31	·0909					
13. 58	22. 45		***					
	***	10. 10	·0911					
16. 22	22. 50	10. 29	·0918					
	***	10. 40	·0917					
17. 25	26. 30	10. 58	·0921					
18. 0	25. 5	11. 21	·0918					
18. 27	22. 25	11. 42	·0945					
18. 45	20. 30	11. 53	·0943					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 1		Apr. 1						
h m	° ' "	h m		h m		h m	°	
19. 6	21. 20. 30	12. 10	·0947					
19. 16	17. 25	12. 40	·0917					
19. 26	20. 40	12. 58	·0913					
19. 50	17. 30	13. 22	·0919					
20. 50	18. 25	13. 37	·0915					
22. 56	28. 20	14. 48	·0919					
23. 25	29. 30	16. 10	·0933					
23. 32	31. 35	16. 43	·0929					
23. 59	32. 15	17. 22	·0933					
		17. 53	·0943					
		18. 15	·0944					
		18. 35	·0936					
		19. 0	·0933					
		19. 13	·0939					
		19. 40	·0928					
		19. 54	·0929					
		21. 5	·0916					
		22. 14	·0899					
		22. 31	·0895					
			***					
		23. 24	·0895					
		23. 36	·0897					
		23. 59	·0891					
Apr. 2		Apr. 2				Apr. 2		
0. 0	21. 32. 15	0. 0	·0891			1. 0	51·0	
0. 32	34. 20	0. 45	·0895			3. 0	54·0	
0. 46	34. 20	0. 59	·0893			9. 0	56·5	
0. 57	33. 30	1. 22	·0896			22. 0	52·2	
1. 50	33. 30	2. 32	·0913					
2. 2	34. 50	2. 56	·0911					
2. 18	35. 0	3. 33	·0918					
3. 7	31. 30	3. 45	·0916					
3. 18	31. 40	4. 4	·0922					
4. 42	27. 50	4. 28	·0924					
5. 12	27. 40	4. 46	·0921					
5. 47	26. 15	5. 11	·0925					
6. 18	26. 45	5. 39	·0923					
7. 3	19. 10	6. 7	·0916					
7. 15	19. 40	6. 39	·0923					
7. 36	23. 20	6. 51	·0922					
8. 20	23. 35	7. 11	·0931					
9. 45	24. 0	7. 28	·0922					
	***	7. 41	·0928					
10. 37	26. 10	7. 50	·0924					
10. 58	23. 0	8. 11	·0919					
11. 15	22. 30	9. 36	·0909					
11. 38	21. 20	10. 27	·0913					
11. 50	22. 30	10. 42	·0935					
12. 7	22. 20	10. 56	·0925					
12. 30	23. 40	11. 11	·0927					
13. 3	24. 35	11. 39	·0917					
13. 47	23. 30	11. 48	·0918					
15. 15	26. 0	12. 0	·0913					
15. 48	22. 30	12. 54	·0910					
16. 9	22. 5	13. 36	·0915					
16. 40	23. 10	14. 23	·0912					
16. 50	23. 0	15. 40	·0917					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 2		Apr. 2						
h m	° ' "	h m		h m		h m	°	
17. 15	21. 23. 50	16. 16	·0914					
17. 30	23. 15	16. 39	·0917					
17. 52	27. 5	17. 23	·0913					
	***	18. 12	·0925					
18. 42	21. 20	18. 45	·0923					
18. 53	17. 50	18. 51	·0917					
	***	19. 11	·0926					
19. 18	20. 0		***					
19. 29	18. 0	20. 42	·0911					
19. 34	19. 10	21. 29	·0900					
19. 45	14. 15	22. 44	·0888					
19. 56	17. 50	23. 59	·0891					
	***							
20. 28	18. 20							
21. 39	21. 25							
23. 59	33. 10							
Apr. 3		Apr. 3				Apr. 3		
0. 0	21. 33. 10	0. 0	·0891			9. 0	60·0	
1. 25	36. 30		***			21. 0	54·5	
2. 15	35. 20	3. 33	·0919					
5. 8	26. 35	3. 45	·0917					
5. 45	26. 25	4. 7	·0921					
6. 25	24. 40	4. 23	·0916					
8. 15	26. 30	5. 47	·0917					
8. 30	23. 10	6. 15	·0913					
	***	6. 50	·0920					
9. 45	26. 0	7. 17	·0914					
10. 0	21. 15		***					
10. 50	25. 30	9. 4	·0911					
11. 12	24. 0	9. 40	·0913					
12. 4	25. 45	9. 58	·0925					
12. 17	27. 30	10. 30	·0911					
12. 45	25. 30	10. 49	·0913					
13. 25	26. 30	11. 7	·0922					
14. 15	25. 30	11. 30	·0912					
16. 30	26. 0	12. 12	·0913					
17. 52	23. 30	12. 29	·0916					
	***	13. 22	·0912					
19. 55	19. 45	17. 39	·0919					
	***	18. 43	·0915					
			***					
20. 50	19. 30							
22. 34	28. 15	22. 39	·0876					
	(†)		(†)					
Apr. 4		Apr. 4				Apr. 4		
	(†)		(†)			1. 0	[illegible]	
0. 19	21. 34. 5	0. 15	·0885			3. 0	63·2	
	***	0. 32	·0884			9. 0	65·5	
1. 27	34. 50	0. 51	·0888			21. 0	56·0	
	***	1. 12	·0885					
2. 28	33. 35		(†)					
3. 20	30. 30	2. 51	·0888					
4. 33	26. 45	4. 11	·0890					
5. 45	24. 25	5. 12	[illegible]					
7. 3	24. 30	5. 29	·0903					
7. 32	23. 30	5. 45	[illegible]					
8. 47	24. 10	5. 51	[illegible]					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 4		Apr. 4						
h m	° ′ ″	h m		h m		h m	°	°
10. 18	21. 23. 5	7. 55	·0901					
12. 18	23. 0	10. 51	·0910					
13. 20	24. 0	11. 1	·0909					
13. 45	23. 5	12. 43	·0913					
14. 2	23. 20	12. 51	·0923					
14. 20	22. 5	12. 58	·0920					
14. 42	22. 5	13. 50	·0918					
15. 11	23. 20	14. 12	·0922					
15. 24	25. 30	15. 5	·0919					
16. 6	27. 35	15. 19	·0922					
16. 22	26. 10	15. 32	·0918					
16. 42	26. 30	16. 13	·0926					
18. 55	20. 15		***					
19. 23	17. 10	17. 0	·0924					
19. 34	19. 0	17. 26	·0926					
19. 47	19. 50	18. 45	·0927					
20. 0	18. 15	20. 51	·0905					
20. 18	18. 35	21. 30	·0897					
20. 30	18. 5	21. 58	·0888					
20. 53	19. 20	22. 21	·0886					
23. 5	29. 30	22. 43	·0891					
23. 59	32. 45	23. 5	·0890					
		23. 59	·0896					
Apr. 5		Apr. 5				Apr. 5		
0. 0	21. 32. 45	0. 0	·0896			1. 0	59 ·0	
0. 22	32. 45	0. 17	·0897			3. 0	61 ·0	
0. 33	34. 20	0. 38	·0906			9. 0	64 ·2	
1. 7	32. 50	0. 58	·0902			21. 0	58 ·0	
1. 27	35. 0	1. 23	·0912					
2. 2	33. 40	1. 51	·0905					
2. 38	33. 45	2. 11	·0913					
3. 42	29. 25	2. 39	·0920					
5. 4	26. 20	3. 49	·0893					
6. 10	26. 20	4. 11	·0891					
6. 32	26. 30	4. 43	·0904					
7. 15	25. 20	5. 0	·0901					
7. 55	25. 30	6. 52	·0907					
8. 20	24. 0	7. 21	·0916					
8. 45	24. 20	7. 51	·0917					
9. 35	23. 30	8. 11	·0909					
10. 15	23. 50	8. 23	·0910					
11. 6	21. 55	8. 37	·0917					
	***	9. 24	·0909					
12. 5	23. 45	9. 35	·0910					
12. 15	23. 0	9. 45	·0908					
13. 48	25. 35	10. 11	·0909					
17. 23	24. 50	10. 13	·0908					
18. 37	20. 30	10. 28	·0914					
18. 56	20. 35	11. 32	·0912					
19. 43	18. 30	11. 47	·0915					
20. 20	18. 15	11. 57	·0909					
21. 11	20. 40	12. 22	·0914					
22. 48	29. 30	12. 55	·0911					
23. 6	29. 40	16. 12	·0925					
23. 59	33. 0	18. 11	·0924					
		18. 43	·0927					
		19. 11	·0920					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Apr. 5						
h m	′ ″	h m		h m		h m	°	°
		22. 22	·0865					
		22. 52	·0892					
		23. 28	·0896					
		23. 37	·0900					
			(†)					
Apr. 6		Apr. 6				Apr. 6		
0. 0	21. 33. 0		(†)			1. 0	62 ·0	
0. 24	34. 10	1. 0	·0894*			3. 0	66 ·0	
1. 37	34. 0	3. 0	·0906*			9. 0	69 ·4	
2. 16	34. 0	5. 45	·0862			21. 0	61 ·2	
2. 41	32. 5		***					
2. 54	33. 10	6. 53	·0877					
3. 12	32. 20		***					
3. 33	33. 25	10. 13	·0883					
3. 50	31. 20	10. 21	·0880					
4. 6	31. 20		***					
4. 22	29. 15	11. 0	·0882					
4. 40	29. 15	11. 13	·0879					
5. 4	31. 20	12. 5	·0883					
5. 30	27. 10	12. 15	·0888					
6. 15	27. 35	12. 44	·0884					
7. 42	25. 15	13. 0	·0896					
11. 50	23. 20	13. 8	·0895					
	(†)	13. 17	·0898					
21. 0	24. 34*	13. 57	·0884					
		14. 18	·0869					
		14. 44	·0889					
		15. 9	·0887					
		15. 14	·0894					
		15. 26	·0887					
			***					
		16. 13	·0897					
		16. 23	·0895					
		16. 42	·0903					
		16. 57	·0898					
		17. 17	·0906					
		18. 4	·0895					
		18. 27	·0884					
		18. 53	·0896					
			***					
		20. 0	·0897					
		20. 30	·0885					
		21. 14	·0873					
		21. 30	·0877					
		21. 58	·0869					
		22. 16	·0872					
		22. 30	·0867					
		22. 42	·0871					
		22. 53	·0866					
		23. 59	·0857					
Apr. 7		Apr. 7				Apr. 7		
	(†)	0. 0	·0857			1. 0	66 ·0	
1. 0	21. 40. 10*	0. 13	·0855			3. 0	69 ·0	
3. 0	33. 20*	0. 22	·0862			9. 0	72 ·0	
3. 7	30. 50	0. 31	·0859			21. 0	60 ·0	
5. 50	21. 40	0. 40	·0863					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							of H. F. Magnet.	of V. F. Magnet.
Apr. 7		Apr. 7						
h m	° ′ ″	h m		h m		h m	°	°
6. 9	21. 21. 30	0. 50	·0861					
6. 33	17. 55	1. 16	·0869					
7. 40	21. 50	1. 42	·0857					
7. 54	21. 0	1. 57	·0860					
8. 4	21. 35	2. 13	·0852					
8. 19	20. 30	2. 42	·0878					
8. 47	22. 35	2. 58	·0847					
9. 8	21. 10	3. 43	·0865					
9. 57	23. 30	3. 58	·0869					
10. 22	21. 45	4. 11	·0861					
10. 50	24. 10	4. 23	·0856					
14. 0	24. 35	4. 58	·0859					
16. 55	25. 5	5. 11	·0855					
18. 11	23. 55	5. 38	·0868					
18. 40	21. 50	5. 58	·0865					
18. 48	19. 50	6. 15	·0859					
18. 52	20. 30	6. 40	·0870					
19. 3	17. 30	6. 48	·0868					
19. 14	19. 0	7. 33	·0872					
19. 27	17. 30	7. 52	·0867					
20. 2	17. 30	8. 0	·0869					
20. 15	15. 10	8. 13	·0867					
20. 34	16. 45	8. 40	·0876					
20. 50	16. 25	8. 57	·0869					
21. 45	19. 15		***					
23. 15	27. 5	10. 40	·0873					
23. 21	26. 30	10. 53	·0877					
23. 44	29. 20	11. 15	·0870					
23. 59	31. 30	11. 46	·0890					
		12. 21	·0877					
		12. 42	·0874					
		13. 31	·0885					
		14. 0	·0880					
		16. 35	·0895					
			***					
		19. 36	·0894					
		19. 56	·0885					
		20. 15	·0887					
		21. 19	·0873					
		21. 42	·0872					
		22. 11	·0857					
		22. 30	·0853					
		23. 40	·0849					
		23. 59	·0864					
Apr. 8		Apr. 8				Apr. 8		
0. 0	21. 31. 30	0. 0	·0864			1. 0	61·0	
1. 17	36. 25	1. 45	·0883			3. 0	60·8	
1. 56	36. 25	3. 4	·0908			9. 40	60·0	
2. 15	37. 40	3. 13	·0900			21. 0	57·5	
2. 50	37. 20	3. 30	·0906					
3. 9	34. 30	3. 42	·0903					
3. 23	34. 30	4. 13	·0912					
3. 42	32. 25	4. 40	·0904					
4. 4	32. 30	4. 51	·0906					
5. 30	27. 45	5. 13	·0903					
5. 41	28. 35	6. 14	·0915					
6. 15	26. 30	6. 59	·0921					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	of V. F. Magnet.
Apr. 8		Apr. 8						
h m	′ ″	h m		h m		h m	°	°
9. 22	21. 28. 10	7. 44	·0919					
10. 20	26. 40	10. 56	·0921					
10. 33	27. 25	11. 15	·0917					
12. 2	25. 50	11. 31	·0923					
12. 33	26. 50	15. 30	·0927					
13. 15	24. 30	17. 42	·0926					
13. 45	28. 25	17. 52	·0921					
14. 28	21. 0	18. 24	·0922					
15. 23	24. 40	18. 33	·0917					
15. 45	32. 0	20. 28	·0914					
16. 4	29. 40	21. 45	·0900					
16. 18	31. 30	22. 11	·0885					
16. 40	26. 20	22. 45	·0876					
17. 42	29. 15	23. 21	·0873					
17. 50	31. 20		(†)					
18. 20	29. 30							
18. 45	30. 30							
19. 17	26. 25							
	***							
19. 56	26. 35							
20. 22	24. 15							
	***							
22. 10	26. 35							
	***							
23. 59	33. 55							
Apr. 9		Apr. 9				Apr. 9		
0. 0	21. 33. 55		(†)			1. 0	59·0	
1. 32	37. 10	0. 30	·0871			3. 0	61·0	
4. 38	27. 15	2. 39	·0881			9. 0	61·5	
5. 26	25. 30	3. 0	·0880			22. 30	56·5	
6. 50	25. 30	3. 13	·0883					
7. 38	27. 25		***					
8. 20	24. 35	6. 11	·0896					
9. 0	26. 10	6. 27	·0894					
9. 45	19. 30	6. 44	·0899					
9. 58	21. 35	7. 8	·0892					
10. 12	28. 40	7. 27	·0896					
10. 33	24. 5	7. 32	·0900					
10. 50	24. 40		***					
11. 11	22. 30	10. 0	·0899					
11. 40	22. 25	10. 11	·0895					
11. 57	24. 30	10. 15	·0897					
13. 18	25. 30	10. 29	·0896					
13. 32	23. 45	10. 38	·0899					
13. 57	24. 10	11. 53	·0899					
14. 15	26. 45	12. 11	·0903					
14. 30	34. 50	12. 27	·0900					
15. 20	33. 5	12. 42	·0904					
15. 56	24. 45	13. 45	·0905					
16. 45	23. 20	14. 17	·0903					
17. 50	23. 55	14. 30	·0909					
18. 17	22. 20	15. 7	·0909					
20. 12	20. 25	15. 42	·0916					
20. 54	20. 10	16. 13	·0909					
21. 30	21. 15	16. 28	·0911					
22. 42	27. 20	16. 51	·0907					
23. 59	35. 40	18. 18	·0912					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Apr. 9						
h m	° ′ ″	h m		h m		h m	°	°
		20. 21	·0906					
		21. 57	·0890					
		22. 45	·0883					
		23. 12	·0885					
		23. 36	·0892					
		23. 53	·0871					
		23. 59	·0873					
Apr. 10		Apr. 10				Apr. 10		
0. 0	21. 35. 40	0. 0	·0873			8. 0	59·0	
1. 5	38. 30	1. 7	·0890			21. 0	51·4	
2. 23	35. 50	1. 16	·0889					
4. 26	28. 35	1. 39	·0893					
5. 39	26. 10	1. 57	·0891					
8. 11	26. 30	2. 28	·0897					
9. 18	25. 25	2. 41	·0895					
9. 38	21. 45	2. 57	·0901					
10. 18	25. 50	3. 36	·0896					
11. 15	25. 20		***					
11. 43	26. 20	5. 45	·0899					
12. 47	26. 25	5. 57	·0897					
13. 15	28. 20	6. 36	·0901					
14. 15	26. 45	7. 13	·0899					
14. 44	27. 40	7. 37	·0903					
	***	7. 52	·0900					
16. 50	25. 50	8. 14	·0905					
18. 26	20. 50	8. 49	·0900					
19. 52	19. 15		***					
20. 30	20. 50	11. 13	·0900					
20. 47	20. 0		***					
21. 0	23. 55	12. 28	·0907					
21. 22	24. 20	12. 59	·0904					
	***	13. 15	·0907					
22. 45	35. 0	14. 14	·0904					
22. 53	34. 30	16. 22	·0914					
23. 59	38. 35	19. 11	·0908					
		20. 45	·0895					
		21. 30	·0883					
		22. 42	·0868					
		22. 59	·0861					
		23. 29	·0870					
		23. 43	·0868					
		23. 59	·0869					
Apr. 11		Apr. 11				Apr. 11		
	(†)	0. 0	·0869			1. 0	56·0	
0. 45	21. 40. 50	0. 53	·0879			3. 0	59·0	
1. 22	41. 10	1. 21	·0890			9. 0	59·5	
	***	1. 45	·0885			21. 0	50·0	
3. 12	33. 45	1. 57	·0891					
3. 18	35. 0	2. 15	·0891					
3. 40	30. 15	2. 39	·0896					
5. 32	26. 0	2. 49	·0891					
6. 20	25. 0	3. 17	·0900					
6. 47	25. 20	3. 36	·0895					
7. 6	25. 30	3. 44	·0897					
8. 8	25. 40	4. 11	·0895					
8. 47	20. 55	4. 41	·0897					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 11		Apr. 11						
h m	° ′ ″	h m		h m		h m	°	°
9. 18	21. 26. 15	5. 3	·0895					
9. 37	26. 0	5. 30	·0903					
10. 1	27. 5	5. 53	·0897					
14. 5	27. 35	7. 27	·0904					
14. 28	26. 0	8. 4	·0903					
15. 12	27. 10	8. 22	·0896					
15. 28	25. 45	8. 36	·0901					
16. 29	25. 30	9. 0	·0899					
	***	9. 13	·0903					
18. 47	21. 45	9. 19	·0901					
19. 6	19. 15	9. 45	·0904					
	***	9. 58	·0901					
19. 41	19. 20		***					
20. 4:	23. 45	12. 0	·0905					
20. 39	19. 52	12. 11	·0908					
20. 42	22. 30	12. 21	·0905					
20. 50	21. 35	12. 41	·0910					
21. 6	24. 25	12. 53	·0907					
21. 50	23. 45	13. 26	·0909					
	***	13. 42	·0907					
22. 20	28. 30	13. 58	·0909					
22. 32	27. 40	14. 11	·0912					
22. 51	30. 55	14. 37	·0910					
23. 59	33. 40	15. 21	·0917					
		15. 42	·0914					
		15. 53	·0915					
		16. 45	·0914					
		17. 18	·0919					
		18. 52	·0908					
		19. 19	·0911					
		19. 40	·0901					
		19. 45	·0903					
		20. 27	·0888					
		20. 51	·0895					
		21. 50	·0887					
		21. 54	·0891					
			***					
		22. 13	·0891					
		22. 30	·0882					
		22. 51	·0883					
		23. 30	·0877					
		23. 59	·0879					
Apr. 12		Apr. 12				Apr. 12		
0. 0	21. 33. 40	0. 0	·0879			1. 0	53·0	
0. 46	36. 30	0. 15	·0887			3. 0	56·0	
1. 2	34. 55	0. 23	·0884			9. 0	56·0	
1. 14	36. 20	0. 39	·0886			21. 0	49·6	
1. 35	35. 35	0. 57	·0881					
1. 47	36. 25	1. 13	·0889					
2. 6	35. 0	1. 30	·0887					
2. 18	35. 20	1. 44	·0892					
2. 40	33. 5	2. 0	·0889					
5. 30	26. 25	2. 13	·0896					
6. 55	24. 50	2. 30	·0889					
7. 37	26. 45	2. 53	·0892					
8. 45	25. 50	3. 15	·0905					
9. 0	28. 40	3. 36	·0903					
			***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr.12		Apr.12						
h m	° ′ ″	h m		h m		h m	°	°
9. 30	21. 21. 15	6. 14	·0904					
10. 24	21. 5	6. 46	·0909					
10. 50	24. 20	6. 53	·0907					
11. 30	25. 40	7. 38	·0906					
11. 38	25. 35	7. 44	·0909					
12. 28	33. 45	8. 36	·0910					
12. 32	33. 30	9. 11	·0920					
12. 39	34. 25	9. 17	·0911					
13. 0	29. 30	9. 45	·0908					
	***	9. 54	·0912					
13. 36	30. 10	10. 30	·0909					
	***	10. 43	·0911					
15. 4	25. 30	11. 7	·0907					
	***	11. 55	·0916					
17. 0	24. 5		***					
	***	12. 44	·0910					
17. 26	25. 30	12. 54	·0915					
	***	13. 11	·0907					
18. 40	21. 40		***					
18. 56	22. 0	14. 16	·0917					
19. 2	21. 5		***					
19. 15	22. 10	15. 36	·0914					
19. 25	20. 25	16. 21	·0922					
19. 40	18. 30	16. 56	·0921					
19. 44	20. 5	17. 7	·0924					
19. 53	18. 0		***					
20. 1	20. 20	17. 30	·0917					
	***		***					
21. 12	21. 40	19. 40	·0916					
22. 3	25. 30	19. 51	·0909					
22. 33	28. 30		***					
22. 47	31. 20	20. 55	·0890					
23. 5	31. 10	21. 1	·0883					
23. 24	33. 35	21. 29	·0881					
23. 43	33. 30	21. 48	·0889					
23. 59	37. 15	23. 2	·0877					
		23. 28	·0877					
		23. 39	·0875					
		23. 55	·0894					
		23. 59	·0895					
Apr.13		Apr.13				Apr.13		
0. 0	21. 37. 20	0. 0	·0895			1. 0	51 ·0	
0. 47	39. 45	0. 17	·0897			3. 0	52 ·5	
1. 8	38. 50	0. 43	·0885			9. 0	53 ·8	
1. 45	39. 30	0. 59	·0863			21. 0	46 ·0	
	***	1. 18	·0866					
3. 4	32. 40	1. 36	·0882					
3. 15	33. 30	2. 27	·0908					
4. 7	29. 40	2. 36	·0901					
5. 40	25. 35	2. 45	·0909					
5. 57	26. 5	2. 52	·0907					
6. 13	24. 40	3. 5	·0906					
6. 20	25. 30	3. 12	·0913					
	***		***					
8. 52	27. 25	3. 52	·0907					
9. 11	23. 10		***					
9. 27	24. 45	4. 45	·0907					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr.13		Apr.13						
h m	° ′ ″	h m		h m		h m	°	°
9. 45	21. 19. 20	4. 52	[illegible]					
10. 18	27. 15	5. 14	·0904					
10. 45	25. 0	5. 37	·0905					
11. 17	26. 5	5. 53	·0916					
11. 50	23. 30		***					
	***	6. 28	·0908					
12. 55	24. 30	6. 40	·0912					
13. 15	27. 5	6. 52	·0904					
13. 36	31. 10	7. 12	·0906					
	***	7. 22	·0904					
13. 50	31. 0	7. 40	·0910					
14. 9	29. 10	8. 0	·0916					
14. 33	28. 0	8. 16	·0909					
14. 50	28. 30	8. 54	·0908					
15. 6	27. 35	9. 11	·0918					
15. 26	29. 15	9. 34	·0910					
15. 42	28. 10	9. 44	·0915					
15. 51	27. 5	10. 7	·0918					
16. 8	28. 0	10. 22	·0907					
16. 15	26. 30	10. 42	·0906					
	***	11. 15	·0921					
16. 50	27. 25	11. 30	·0915					
	***	11. 58	·0909					
17. 45	25. 30	12. 12	·0915					
	***	12. 22	·0913					
18. 26	21. 45	12. 43	·0915					
	***	13. 2	·0911					
19. 15	18. 50	13. 25	·0913					
	***	13. 38	·0909					
19. 37	18. 50	13. 56	·0919					
19. 45	17. 0	14. 25	·0914					
19. 53	18. 30		***					
20. 10	16. 25	16. 45	·0922					
20. 17	18. 5		***					
	***	17. 32	·0909					
23. 59	36. 40		***					
		18. 40	·0912					
			***					
		20. 7	·0903					
			***					
		20. 43	·0891					
		22. 6	·0880					
		22. 17	·0882					
		22. 56	·0872					
		23. 11	·0875					
		23. 15	·0880					
		23. 22	·0877					
		23. 59	·0884					
Apr.14		Apr.14				Apr.14		
0. 0	21. 36. 40	0. 0	·0884			1. 0	51 ·0	
0. 38	38. 45	0. 10	·0886			3. 0	54 ·3	
1. 3	39. 35		(†)			9. 0	55 ·5	
	***	1. 0	·0894			21. 0	49 ·0	
2. 8	37. 30	1. 42	·0901					
2. 30	34. 25	1. 46	·0904					
3. 2	32. 0	1. 52	·0903					
3. 11	32. 45	2. 0	·0905					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.14		Apr.14						
h m	° ′ ″	h m		h m		h m	°	°
3. 38	21. 30. 40	2. 20	·0889					
3. 53	31. 20	2. 27	·0892					
4. 50	23. 0	2. 48	·0883					
5. 22	26. 30	3. 6	·0891					
	***	3. 16	·0889					
9. 24	28. 5	3. 48	·0904					
	***	4. 10	·0896					
11. 43	26. 50	4. 25	·0894					
12. 25	28. 10	5. 3	·0913					
12. 40	27. 55	5. 36	·0899					
13. 0	34. 30	5. 47	·0899					
13. 22	30. 0	5. 56	·0904					
13. 37	28. 15		***					
14. 15	28. 20	7. 11	·0907					
15. 15	23. 5	7. 25	·0904					
	***	7. 51	·0909					
17. 2	27. 50	7. 58	·0907					
18. 30	23. 20	8. 15	·0906					
20. 8	20. 10	8. 30	·0909					
20. 50	20. 10	8. 52	·0907					
21. 30	21. 50	9. 7	·0911					
23. 59	37. 20	9. 36	·0900					
		9. 44	·0911					
		9. 51	·0909					
		10. 10	·0911					
		10. 18	·0908					
		11. 29	·0909					
		12. 12	·0914					
		12. 54	·0912					
		13. 21	·0923					
			***					
		14. 1	·0915					
		14. 20	·0920					
		14. 52	·0922					
		15. 19	·0908					
		16. 11	·0910					
			***					
		16. 52	·0905					
		17. 22	·0911					
			***					
		18. 52	·0903					
		19. 10	·0899					
		20. 59	·0877					
		22. 7	·0874					
		22. 15	·0869					
		22. 41	·0870					
		22. 50	·0868					
		23. 36	·0875					
			(†)					
Apr.15		Apr.15				Apr.15		
0. 0	21. 37. 20		(†)			1. 0	50 ·5	
	***	0. 17	·0877			3. 0	52 ·2	
0. 56	39. 0		***			9. 0	50 ·5	
	***	1. 39	·0882			21. 0	44 ·0	
2. 45	34. 20	1. 50	·0888					
	***		***					
3. 41	30. 45	2. 52	·0896					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.15		Apr.15						
h m	° ′ ″	h m		h m		h m	°	°
3. 50	21. 31. 20	3. 30	·0895					
	***	3. 49	·0909					
4. 13	28. 30	3. 55	·0904					
	***	4. 13	·0898					
5. 45	24. 15	4. 18	·0900					
5. 58	22. 30	4. 31	·0897					
7. 47	27. 10	5. 3	·0917					
8. 30	26. 20	5. 30	·0898					
9. 40	22. 50	5. 53	·0915					
9. 50	24. 30	6. 15	·0901					
	***	6. 37	·0899					
10. 52	24. 15	7. 52	·0910					
11. 15	25. 45	8. 5	·0909					
11. 30	28. 20	8. 15	·0912					
11. 42	25. 50	9. 18	·0904					
12. 10	21. 45	9. 43	·0911					
12. 18	23. 0	10. 0	·0906					
13. 22	27. 30		***					
13. 56	26. 15	10. 51	·0901					
14. 12	27. 35	11. 28	·0911					
14. 17	26. 20	11. 42	·0909					
14. 30	27. 30	11. 54	·0915					
15. 52	27. 55	13. 52	·0909					
16. 17	30. 5		***					
16. 38	29. 0	18. 15	·0929					
16. 43	29. 50	18. 36	·0924					
	***	18. 44	·0926					
17. 27	25. 35	20. 43	·0907					
18. 57	22. 30	22. 5	·0884					
19. 8	21. 20	22. 55	·0878					
19. 45	19. 35	23. 21	·0880					
21. 30	21. 5	23. 50	·0884					
22. 52	26. 30	23. 59	·0884					
23. 59	33. 10							
Apr.16		Apr.16				Apr.16		
0. 0	21. 33. 10	0. 0	·0884			1. 0	47 ·8	
	***	0. 10	·0881			3. 0	50 ·5	
2. 46	35. 20	0. 27	·0884			9. 0	52 ·0	
3. 2	34. 15		(†)			22. 17	44 ·5	
3. 16	35. 20	1. 0	·0888*					
3. 32	33. 15	2. 44	·0892					
4. 33	30. 25	2. 52	·0895					
5. 4	27. 30	2. 58	·0893					
5. 48	25. 20	3. 18	·0904					
7. 43	24. 15	3. 37	·0897					
10. 0	26. 50	3. 52	·0902					
10. 9	26. 0	4. 13	·0902					
	***	4. 39	·0909					
11. 15	26. 20	4. 46	·0904					
11. 57	25. 5	5. 2	·0898					
	***	5. 22	·0899					
13. 12	26. 20	5. 30	·0903					
13. 26	25. 25	6. 11	·0906					
13. 45	25. 10	6. 30	·0901					
14. 5	27. 45	7. 12	·0903					
14. 28	23. 15	7. 43	·0907					
15. 0	25. 35	8. 13	·0901					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 16		Apr. 16						
h m	° ′ ″	h m		h m		h m	°	°
15. 52	21. 25. 0	10. 16	·0904					
16. 13	23. 40	11. 28	·0908					
	***	12. 11	·0907					
16. 44	24. 50	13. 21	·0909					
16. 59	23. 50	13. 30	·0914					
17. 15	24. 0	13. 40	·0911					
	***	13. 58	·0918					
19. 40	18. 30	14. 28	·0919					
19. 50	16. 40	14. 45	·0923					
20. 43	17. 5		***					
21. 22	19. 35	15. 24	·0923					
23. 59	35. 10	16. 0	·0928					
			***					
		17. 12	·0927					
		17. 26	·0923					
		18. 25	·0922					
		20. 9	·0911					
		21. 29	·0891					
		21. 52	·0890					
		22. 12	·0885					
		23. 11	·0887					
		23. 56	·0895					
		23. 59	·0896					
Apr. 17		Apr. 17				Apr. 17		
0. 0	21. 35. 10	0. 0	·0897			8. 51	48·0	
1. 18	37. 5	0. 14	·0901			21. 0	42·0	
	***	0. 21	·0898					
3. 45	33. 15	0. 55	·0907					
4. 13	30. 45	2. 12	·0917					
6. 0	26. 50	2. 27	·0925					
6. 26	27. 0	2. 40	·0927					
6. 36	26. 20	2. 50	·0924					
6. 53	26. 45	3. 11	·0935					
7. 11	26. 5		***					
7. 20	27. 0	3. 40	·0930					
7. 37	25. 15	3. 46	·0936					
8. 0	26. 15	4. 15	·0921					
8. 12	25. 30	4. 54	·0920					
8. 48	26. 35	5. 45	·0925					
9. 15	25. 40	5. 57	·0921					
15. 12	27. 10	6. 23	·0928					
17. 10	25. 50	6. 42	·0924					
18. 16	23. 25	7. 11	·0922					
19. 21	20. 0	7. 21	·0926					
19. 42	20. 5	7. 42	·0922					
20. 3	18. 40	7. 51	·0925					
20. 37	19. 30	8. 12	·0920					
20. 42	20. 40	8. 28	·0925					
20. 53	19. 45	9. 12	·0922					
21. 4	21. 45	10. 12	·0927					
21. 12	20. 20	10. 30	·0925					
21. 27	24. 10	12. 25	·0927					
22. 43	28. 50	15. 10	·0934					
23. 59	36. 40	16. 43	·0931					
		18. 37	·0931					
		20. 11	·0914					
		20. 20	·0915					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Apr. 17						
h m	° ′ ″	h m		h m		h m	°	°
		21. 12	·0900					
		21. 54	·0893					
		22. 35	·0890					
		22. 54	·0893					
		23. 25	·0891					
		23. 50	·0895					
		23. 59	·0894					
Apr. 18		Apr. 18				Apr. 18		
0. 0	21. 36. 20	0. 0	·0894			1. 0	46·0	
1. 17	41. 25	0. 39	·0894			3. 0	48·8	
2. 8	40. 0	1. 16	·0903			9. 0	53·0	
5. 29	26. 35	1. 47	·0904			21. 0	45·0	
11. 6	25. 30	2. 33	·0912					
11. 45	23. 40	3. 28	·0910					
13. 0	27. 25	3. 53	·0903					
13. 57	25. 30	4. 21	·0903					
14. 58	25. 50	4. 36	·0906					
15. 10	25. 25	4. 57	·0903					
16. 9	31. 5	5. 11	·0904					
16. 43	28. 10	5. 40	·0897					
	***	5. 52	·0902					
19. 45	18. 40	6. 2	·0901					
20. 4	16. 25	7. 5	·0913					
20. 39	20. 20	7. 30	·0910					
20. 50	20. 0	8. 27	·0908					
22. 6	23. 45	9. 52	·0910					
22. 37	29. 45	10. 11	·0907					
	(†)		***					
		12. 5	·0908					
		12. 17	·0912					
		12. 46	·0912					
		13. 12	·0911					
		13. 15	·0916					
		13. 55	·0915					
			***					
		15. 21	·0921					
		15. 40	·0917					
		15. 52	·0923					
		16. 35	·0930					
		18. 37	·0925					
		20. 13	·0915					
		21. 0	·0897					
		21. 56	·0879					
		22. 15	·0881					
		22. 50	·0879					
		23. 15	·0865					
		23. 36	·0864					
		23. 59	·0866					
Apr. 19		Apr. 19				Apr. 19		
	(†)	0. 0	·0866			1. 0	56·0	
1. 4	21. 37. 25	0. 21	·0869			3. 0	55·0	
1. 38	37. 20	0. 26	·0862			9. 0	58·5	
	***	1. 29	·0875			21. 0	47·3	
5. 17	26. 15	2. 18	·0884					
7. 9	23. 30	2. 32	·0883					
7. 36	24. 35	3. 22	·0887					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 19		Apr. 19						
h m	° ′ ″	h m		h m		h m	°	°
15. 30	21. 25. 25	5. 13	·0881					
	***	5. 51	·0882					
17. 40	23. 10	6. 6	·0886					
	***	6. 37	·0887					
20. 22	15. 40	7. 0	·0885					
	***	7. 10	·0888					
22. 25	23. 5	7. 27	·0881					
23. 59	32. 0	8. 11	·0887					
		8. 30	·0885					
		9. 31	·0891					
		9. 52	·0888					
			***					
		15. 15	·0905					
		15. 30	·0907					
		17. 40	·0914					
		19. 11	·0912					
		21. 6	·0887					
		21. 33	·0886					
		22. 15	·0877					
		22. 27	·0879					
		23. 36	·0871					
		23. 59	·0876					
Apr. 20		Apr. 20		Apr. 20		Apr. 20		
0. 0	21. 32. 0	0. 0	·0876	0. 0	·02355	1. 0	52·5	54·0
1. 17	36. 10		***	2. 3	·02037	3. 0	56·0	57·0
1. 40	35. 5	1. 9	·0881	3. 53	·02399	9. 0	58·0	57·8
1. 54	35. 20	1. 27	·0884	11. 42	·02372	21. 0	49·8	51·0
3. 9	31. 45	1. 40	·0883	14. 15	·02510			
4. 13	30. 10	2. 2	·0889	19. 47	·03026			
4. 19	28. 5	2. 51	·0891	23. 59	·02927			
4. 32	29. 55	3. 0	·0887					
4. 50	27. 0	4. 11	·0899					
7. 38	24. 50	4. 22	·0889					
10. 45	24. 55	4. 40	·0906					
16. 44	23. 25	4. 54	·0886					
	***	5. 37	·0894					
19. 53	17. 40		***					
20. 58	20. 0	7. 22	·0897					
23. 59	33. 5	8. 11	·0901					
		8. 18	·0905					
		8. 48	·0900					
			***					
		10. 41	·0908					
		10. 56	·0905					
		11. 30	·0907					
		11. 43	·0903					
		11. 53	·0907					
		12. 25	·0910					
		13. 13	·0908					
		17. 23	·0917					
		19. 11	·0916					
		21. 5	·0902					
		21. 45	·0887					
		23. 15	·0881					
		23. 54	·0885					
		23. 59	·0884					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 21		Apr. 21		Apr. 21		Apr. 21		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 33. 5	0. 0	·0884	0. 0	·02927	1. 0	54·0	54·0
0. 56	35. 0	0. 22	·0880	2. 3	·02742	3. 0	57·0	57·2
1. 45	36. 20	0. 51	·0885	4. 4	·02543	9. 5	60·0	61·0
	(†)	1. 13	·0886	4. 37	·02632	22. 23	49·0	50·0
2. 12	40. 50	1. 44	·0900	4. 51	·02633			
2. 28	37. 0	1. 53	·0941	5. 6	·02794			
2. 44	41. 5	2. 0	·0932	5. 17	·02680			
2. 48	40. 0	2. 7	·0936		***			
3. 0	41. 50	2. 13	·0935	5. 52	·02755			
	(†)	2. 26	·0901		***			
5. 7	38. 45	2. 28	·0903	6. 30	·02693			
5. 18	32. 10	2. 37	·0898	7. 6	·02792			
5. 29	37. 20	2. 46	·0930	7. 25	·02592			
5. 40	31. 15	2. 51	·0928	7. 40	·02594			
5. 45	35. 20	2. 58	·0935	7. 56	·02495			
5. 53	31. 55	3. 4	·0927	8. 15	·02496			
6. 17	41. 10	3. 15	·0965	8. 32	·02240			
6. 46	27. 0	3. 22	·0960	8. 37	·02553			
6. 58	29. 25	3. 37	·0979	8. 46	·02001			
7. 20	18. 20	3. 43	·0975	8. 50	·02202			
7. 42	28. 50	3. 47	·0977	9. 18	·02310			
8. 21	22. 35	3. 54	·0973		***			
9. 0	20. 44*	4. 9	·0949	10. 44	·02203			
	(†)	4. 23	·0979		***			
12. 11	23. 45	4. 30	·0971	11. 56	·02248			
12. 30	19. 40	4. 36	·0980	12. 20	·02141			
12. 43	20. 35	4. 41	·0969	12. 43	·02057			
13. 15	0. 15	4. 43	·0974	13. 40	·02362			
13. 32	9. 50	4. 57	·0948	14. 22	·02362			
13. 50	11. 0	5. 0	·0961	15. 28	·02564			
13. 56	9. 30	5. 12	·0953	15. 56	·02570			
14. 6	12. 5	5. 15	·0966	18. 47	·03130			
14. 17	8. 25	5. 21	·0957	23. 59	·03029			
14. 23	8. 40	5. 30	·0975					
14. 34	8. 10	5. 43	·0955					
14. 45	10. 5	5. 48	·0964					
15. 0	9. 20	5. 57	·0958					
15. 38	27. 25	6. 9	·0965					
16. 17	16. 10	6. 29	·0872					
	***	7. 5	·0944					
16. 55	20. 20	7. 15	·0864					
18. 10	20. 35	7. 30	·0872					
19. 18	18. 40	7. 36	·0881					
19. 30	20. 10	7. 56	·0861					
20. 7	18. 35		***					
20. 56	20. 40	8. 22	·0872					
21. 52	25. 30	8. 28	·0852					
22. 3	34. 35	8. 39	·0887					
23. 38	32. 30	8. 44	·0854					
23. 53	31. 45	8. 50	·0871					
23. 59	31. 45	9. 0	·0840					
		9. 10	·0867					
		9. 35	·0883					
		9. 54	·0849					
		10. 7	·0839					
		10. 14	·0848					
		10. 27	·0839					
		10. 30	·0842					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Apr. 21						
h m	° ′ ″	h m		h m		h m	°	°
		10. 39	·0839					
			***					
		11. 11	·0846					
		11. 26	·0839					
		11. 30	·0844					
		11. 53	·0843					
		12. 12	·0784					
		12. 21	·0788					
		12. 29	·0782					
		12. 50	·0814					
		12. 54	·0810					
		13. 21	·0881					
		13. 30	·0879					
		13. 45	·0885					
		13. 54	·0874					
		14. 11	·0873					
		14. 28	·0865					
		14. 34	·0866					
		14. 49	·0861					
		15. 0	·0865					
		15. 20	·0865					
		15. 35	·0856					
		15. 49	·0880					
		16. 4	·0881					
		16. 15	·0889					
		16. 28	·0886					
			***					
		18. 52	·0895					
		19. 15	·0889					
		19. 22	·0892					
		19. 54	·0890					
		20. 38	·0882					
		20. 45	·0885					
		20. 58	·0881					
		21. 12	·0881					
		21. 35	·0874					
		21. 46	·0876					
		22. 6	·0870					
		22. 13	·0873					
		22. 19	·0871					
		22. 41	·0877					
		23. 13	·0870					
		23. 20	·0867					
		23. 36	·0874					
		23. 45	·0869					
		23. 59	·0873					
Apr. 22		Apr. 22		Apr. 22		Apr. 22		
0. 0	21. 31. 45	0. 0	·0873	0. 0	·03029	8. 15	57·0	57·2
	***	0. 7	·0875	2. 20	·02853	21. 0	47·0	48·0
0. 27	33. 20	0. 13	·0872	3. 52	·02678			
0. 35	34. 40	0. 18	·0874	6. 30	·02279			
0. 48	33. 25	0. 33	·0893	8. 21	·02298			
0. 59	34. 20	0. 48	·0883	9. 15	·02100			
1. 15	32. 55	0. 55	·0891	10. 20	·02210			
1. 50	37. 10	1. 13	·0887	14. 2	·02413			
	***	1. 52	·0921	18. 26	·03082			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 22		Apr. 22		Apr. 22				
h m	° ′ ″	h m		h m		h m	°	°
3. 0	21. 31. 20	2. 18	·0897	22. 25	·03051			
3. 38	30. 20	2. 39	·0901	23. 59	·02972			
3. 52	33. 30	2. 49	·0891					
4. 36	30. 15		***					
7. 45	26. 30	3. 30	·0896					
8. 13	23. 35	3. 39	·0888					
8. 30	13. 10	4. 0	·0935					
8. 42	18. 25	4. 22	·0895					
8. 50	16. 45	4. 29	·0897					
9. 8	41. 0	4. 39	·0889					
9. 22	30. 0	5. 14	·0896					
9. 30	18. 45	5. 25	·0894					
9. 43	27. 10	5. 40	·0905					
9. 47	16. 20	5. 49	·0903					
10. 2	17. 50	6. 14	·0907					
10. 8	16. 5	6. 37	·0903					
10. 28	21. 20	6. 59	·0891					
10. 43	21. 0	7. 21	·0898					
10. 57	22. 45		***					
11. 6	21. 10	8. 14	·0884					
12. 17	21. 50	8. 57	·0959					
12. 45	24. 30	9. 15	·0856					
12. 55	24. 30	9. 28	·0896					
13. 20	33. 15	9. 43	·0872					
13. 38	31. 10	9. 59	·0890					
13. 45	33. 45	10. 10	·0895					
14. 3	28. 40	10. 30	·0880					
14. 28	25. 0	10. 44	·0887					
15. 45	25. 0	10. 57	·0883					
16. 4	23. 5	11. 10	·0886					
16. 13	23. 50	11. 18	·0883					
16. 42	23. 50		***					
17. 43	29. 45	11. 38	·0890					
18. 38	25. 5	12. 11	·0892					
19. 3	22. 10	12. 22	·0889					
19. 22	25. 25	12. 45	·0898					
20. 2	18. 10	13. 14	·0881					
20. 13	21. 5	13. 55	·0900					
20. 17	19. 50	14. 7	·0897					
20. 42	25. 25	14. 44	·0904					
20. 45	21. 50	15. 15	·0899					
20. 48	24. 0	16. 37	·0905					
20. 50	20. 15	17. 0	·0891					
20. 54	23. 20	17. 15	·0892					
	***		***					
22. 17	26. 15	18. 15	·0910					
	(†)		***					
		19. 5	·0910					
			***					
		20. 54	·0884					
		21. 5	·0886					
			***					
		21. 45	·0879					
		22. 20	·0884					
		23. 54	·0875					
		23. 59	·0878					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Apr. 23	
h m	° ′ ″
1. 0	21. 34. 16*
3. 0	35. 16*
9. 0	23. 51*
22. 0	23. 27*

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Apr. 23	
h m	
0. 0	·0878
0. 27	·0897
0. 41	·0893
0. 52	·0882
1. 7	·0887
1. 14	·0881
1. 22	·0890
1. 39	·0889
1. 52	·0896
2. 15	·0882
2. 27	·0880
2. 47	·0891
3. 43	·0905
3. 53	·0911
3. 57	·0909
4. 11	·0916
4. 21	·0907
4. 46	·0906
4. 54	·0902
5. 15	·0923
5. 22	·0925
5. 30	·0908
5. 40	·0913
5. 44	·0909
5. 50	·0918
6. 9	·0895
6. 15	·0903
6. 42	·0892
6. 48	·0889
7. 4	·0900
7. 17	·0909
7. 29	·0904
7. 43	·0905
7. 53	·0894
8. 11	·0901
8. 29	·0889
8. 46	·0900
9. 15	·0885
9. 36	·0890
9. 53	·0887
10. 22	·0897
10. 38	·0895
10. 52	·0897
11. 0	·0888
11. 22	·0893
11. 33	·0891
11. 45	·0875
12. 4	·0921
12. 16	·0887
12. 29	·0885
12. 51	·0902
13. 14	·0899
13. 39	·0903
14. 10	·0894
14. 29	·0903
14. 38	·0901
14. 45	·0903
14. 55	·0897

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Apr. 23	
h m	
0. 0	·02972
1. 52	·02788
3. 2	·02590
3. 47	·02500
4. 58	·02223
7. 33	·02253
9. 45	·02180
11. 4	·02233
11. 56	·02198
12. 25	{ ·02270 ·02246
15. 0	·02447
16. 36	·02537
20. 17	·03021
21. 40	·03097
23. 59	·03090

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
Apr. 23		
h m	°	°
1. 0	53 ·0	53 ·0
3. 0	57 ·0	58 ·0
9. 0	57 ·4	57 ·0
22. 0	51 ·0	52 ·0

Greenwich Mean Solar Time.	Western Declination.
h m	° ′ ″
Apr. 24	
0. 0	21. 32. 40
0. 52	32. 45
1. 17	35. 30
1. 57	35. 30
2. 8	37. 10
3. 0	33. 45
3. 50	33. 20
5. 6	29. 35
6. 15	25. 45
6. 38	26. 10
7. 11	19. 5
	***
7. 45	24. 20
	***
8. 46	26. 10
9. 35	21. 45
9. 44	24. 5
9. 53	22. 30
10. 9	24. 15
10. 24	14. 45
10. 47	23. 30
11. 5	14. 20
	***
11. 36	19. 0
11. 54	17. 15
13. 23	23. 40
13. 52	22. 30
14. 43	23. 45
14. 56	23. 10
15. 8	24. 25
15. 26	23. 20
16. 4	25. 0
16. 17	26. 30
17. 0	23. 20
17. 13	24. 45

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Apr. 23	
h m	
15. 15	·0895
15. 45	·0905
16. 13	·0909
16. 33	·0900
16. 53	·0905
17. 0	·0903
17. 16	·0910
17. 27	·0909
17. 33	·0912
18. 2	·0896
18. 15	·0894
18. 24	·0899
18. 43	·0899
19. 4	·0895
19. 15	·0899
19. 39	·0893
21. 20	·0890
22. 48	·0857
23. 3	·0865
23. 35	·0873
23. 59	·0873
Apr. 24	
0. 0	·0873
0. 37	·0879
0. 57	·0888
1. 12	·0882
1. 37	·0903
1. 46	·0886
2. 11	·0901
2. 21	·0897
3. 20	·0907
3. 54	·0921
4. 24	·0922
4. 53	·0918
5. 24	·0928
5. 30	·0926
5. 44	·0929
5. 58	·0919
7. 12	·0930
7. 17	·0935
7. 32	·0930
8; 30	·0922
8. 42	·0926
9. 19	·0917
9. 45	·0933
9. 57	·0925
10. 4	·0927
10. 22	·0919
10. 38	·0944
10. 58	·0911
11. 15	·0927
11. 29	·0919
11. 45	·0905
12. 2	·0910
12. 26	·0907
12. 59	·0909
13. 23	·0915
	***

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Apr. 24	
0. 0	·03090
6. 20	·03122
11. 56	·02857
15. 46	·02976
19. 4	·03100
22. 45	·03072
23. 59	·03006

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
Apr. 24		
9. 5	54 ·0	55 ·0
21. 6	53 ·6	54 ·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.24		Apr.24						
h m	° ′ ″	h m		h m		h	°	°
17. 20	21. 23. 45	14. 43	·0909					
17. 29	23. 50	14. 54	·0913					
17. 56	20. 40	15. 44	·0905					
18. 15	22. 35	16. 11	·0906					
18. 43	22. 30	16. 35	·0911					
18. 58	23. 35	16. 43	·0908					
19. 20	20. 20	17. 17	·0912					
19. 42	23. 5	17. 43	·0911					
	***	18. 0	·0915					
20. 13	20. 20	19. 22	·0900					
	***	19. 37	·0903					
20. 45	22. 5	19. 51	·0896					
21. 13	21. 30	20. 30	·0884					
22. 0	24. 25	21. 11	·0889					
22. 25	24. 10	22. 2	·0889					
23. 15	29. 40	22. 28	·0876					
	***	22. 57	·0885					
23. 48	32. 5	23. 33	·0881					
	***	23. 48	·0873					
23. 59	30. 45	23. 59	·0875					
Apr.25		Apr.25		Apr.25		Apr.25		
0. 0	21. 30. 45	0. 0	·0875	0. 0	·03006	1. 0	57·0	57·0
0. 28	32. 0	0. 5	·0871	5. 20	·02677	3. 0	58·5	59·0
0. 59	33. 15	0. 59	·0890	9. 22	·02563	9. 0	59·0	59·5
1. 11	31. 50	1. 12	·0886	12. 40	·02627	21. 0	54·5	56·0
2. 5	33. 45	1. 53	·0903	18. 27	·03071			
2. 56	32. 30	2. 45	·0905	23. 59	·02833			
3. 25	30. 25	2. 59	·0909					
6. 28	26. 5	3. 21	·0902					
7. 8	22. 20	3. 45	·0908					
7. 33	23. 45	4. 0	·0901					
7. 45	18. 15	4. 20	·0926					
8. 3	23. 20	4. 58	·0925					
8. 23	20. 30	5. 36	·0913					
8. 50	22. 45	6. 11	·0919					
9. 7	21. 10	6. 53	·0914					
9. 32	23. 40	7. 37	·0919					
10. 9	21. 45	7. 50	·0931					
	***	8. 7	·0913					
11. 8	25. 20	8. 30	·0917					
12. 11	22. 10	8. 47	·0908					
13. 5	24. 45	9. 17	·0909					
15. 20	24. 45	10. 5	·0904					
16. 18	21. 20	10. 13	·0907					
17. 30	23. 40	10. 29	·0904					
	***	10. 40	·0907					
19. 37	19. 25	11. 0	·0907					
19. 58	19. 35	12. 13	·0913					
20. 9	21. 10	12. 23	·0909					
	***	13. 21	·0909					
20. 27	19. 15	14. 15	·0913					
20. 57	19. 45	16. 13	·0910					
	***	18. 9	·0912					
22. 42	27. 20	21. 7	·0895					
23. 3	31. 5	22. 15	·0880					
23. 59	34. 25	22. 45	·0879					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Apr.25						
h m	° ′ ″	h				h m	°	°
		22. 55	·0884					
		23. 59	·0878					
Apr.26		Apr.26		Apr.26		Apr.26		
0. 0	21. 34. 25	0. 0	·0878	0. 0	·02833	1. 0	58·0	59·0
0. 15	33. 50	0. 12	·0875	2. 15	·02706	3. 0	61·0	62·0
0. 28	35. 30	0. 22	·0877	4. 51	·02128	9. 0	60·5	62·0
1. 0	34. 25	0. 40	·0871	8. 23	·01881	21. 0	52·0	54·0
1. 41	37. 15	0. 43	·0872	14. 50	·02310			
3. 5	34. 10	0. 53	·0868	19. 36	·02803			
3. 27	31. 25	1. 37	·0890	23. 37	·02448 ·02392			
4. 43	30. 30	2. 10	·0889					
5. 42	23. 45	2. 28	·0895	23. 59	·02400			
6. 5	25. 0	3. 0	·0897					
6. 30	24. 10	3. 30	·0882					
6. 52	25. 15	4. 22	·0901					
7. 26	23. 50	4. 38	·0897					
7. 53	18. 10	4. 44	·0899					
8. 15	11. 30	4. 51	·0895					
8. 27	16. 10	5. 11	·0901					
8. 45	13. 15	5. 34	·0891					
9. 3	18. 5	6. 21	·0884					
9. 35	20. 40	7. 8	·0905					
10. 8	20. 15	7. 28	·0896					
10. 43	23. 10	7. 51	·0896					
11. 5	21. 30	8. 11	·0910					
11. 56	24. 55	8. 24	·0890					
12. 43	22. 30	8. 43	·0892					
12. 54	23. 5	9. 2	·0880					
14. 8	17. 20	9. 41	·0891					
14. 27	20. 35	9. 58	·0884					
	***	10. 13	·0890					
15. 13	19. 25	10. 25	·0887					
	***	10. 41	·0895					
16. 51	20. 20	10. 54	·0889					
17. 0	21. 10	11. 2	·0894					
17. 13	19. 20	11. 11	·0891					
17. 26	21. 30	11. 29	·0897					
17. 50	20. 15	11. 45	·0894					
18. 5	21. 0	12. 13	·0898					
	***	12. 45	·0895					
18. 37	18. 10	13. 42	·0905					
19. 12	20. 25	13. 57	·0897					
	***	14. 36	·0919					
19. 33	20. 20	15. 0	·0909					
	***	15. 43	·0904					
21. 27	24. 5	16. 40	·0904					
	***	17. 17	·0909					
21. 53	26. 40	17. 29	·0905					
22. 48	27. 55		***					
23. 59	31. 50	19. 28	·0891					
		20. 50	·0895					
		21. 56	·0890					
		22. 11	·0883					
		22. 41	·0884					
		23. 59	·0879					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Apr.27	
h m	° ′ ″
0. 0	21. 31. 50
0. 21	33. 40
2. 11	31. 45
2. 20	33. 20
2. 46	31. 0
	***
4. 56	29. 20
5. 9	31. 5
5. 22	27. 50
5. 38	29. 10
6. 17	18. 25
6. 58	20. 10
7. 18	22. 20
	***
9. 8	26. 25
	***
10. 7	25. 50
10. 28	29. 45
10. 50	24. 10
11. 20	28. 20
12. 4	23. 25
	***
12. 52	25. 20
	***
13. 7	28. 35
13. 48	28. 35
	***
15. 0	23. 20
	***
16. 35	24. 30
	***
17. 54	20. 40
18. 18	17. 45
	***
19. 43	18. 50
20. 0	16. 25
20. 20	21. 15
20. 45	20. 25
22. 4	28. 35
22. 38	28. 10
23. 59	31. 40
Apr.28	
0. 0	21. 31. 40
0. 27	33. 45
0. 58	33. 50
1. 42	31. 10
1. 50	31. 40
2. 37	21. 30. 45
3. 15	32. 20
3. 50	30. 30
4. 15	30. 45
4. 38	29. 20
4. 53	29. 25
6. 0	24. 30
7. 24	22. 30
7. 55	23. 35
8. 30	23. 15
8. 59	24. 10
9. 26	21. 35
10. 15	24. 20
10. 30	23. 20
11. 2	24. 30
11. 13	28. 10
11. 27	25. 20
11. 40	26. 45
11. 53	21. 30
12. 36	24. 35
13. 25	1. 55
13. 52	10. 25
14. 26	17. 20
	***
15. 0	14. 15
15. 10	15. 50
15. 17	14. 45
	***
15. 48	16. 30
16. 20	13. 40
17. 10	22. 15
17. 16	22. 20
17. 29	21. 0
17. 35	21. 35
17. 50	16. 10
17. 56	17. 30
18. 3	16. 20
18. 13	16. 35
18. 26	16. 30
18. 40	13. 20
18. 52	15. 45
	***
20. 24	14. 30
20. 32	11. 15
20. 48	19. 20
21. 5	21. 50
	***
22. 19	31. 5
22. 37	26. 10
	***
23. 3	34. 15
	***
23. 59	36. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Apr.27	
h m	
0. 0	·0879
0. 13	·0892
1. 4	·0883
2. 1	·0889
2. 28	·0905
2. 47	·0897
3. 39	·0909
	***
4. 38	·0915
4. 54	·0909
5. 11	·0917
5. 14	·0914
5. 25	·0922
5. 58	·0889
6. 10	·0892
6. 21	·0905
6. 43	·0907
7. 4	·0894
7. 26	·0885
7. 51	·0883
8. 0	·0888
	***
9. 44	·0897
10. 26	·0914
10. 51	·0899
11. 14	·0909
11. 43	·0903
12. 0	·0905
12. 12	·0901
12. 58	·0902
13. 15	·0913
13. 59	·0905
14. 16	·0907
14. 30	·0905
14. 55	·0908
16. 6	·0895
16. 38	·0899
18. 25	·0901
19. 39	·0898
19. 54	·0893
20. 8	·0895
20. 48	·0891
22. 11	·0865
23. 0	·0879
23. 11	·0876
23. 22	·0877
23. 43	·0873
23. 53	·0874
23. 57	·0877
23. 59	·0875
Apr.28	
0. 0	·0875
0. 8	·0874
0. 30	·0886
1. 0	·0881
1. 39	·0870
2. 12	·0878
2. 40	·0879
3. 21	·0899
3. 55	·0891
4. 21	·0897
5. 0	·0882
5. 40	·0896
5. 51	·0894
6. 13	·0896
6. 30	·0892
6. 58	·0896
7. 24	·0891
7. 51	·0891
8. 12	·0887
10. 57	·0887
11. 15	·0919
11. 20	·0915
11. 26	·0916
11. 38	·0905
12. 2	·0944
12. 14	·0930
12. 30	·0943
13. 5	·0857
13. 13	·0854
13. 33	·0874
13. 54	·0857
14. 5	·0869
14. 14	·0868
14. 30	·0884
14. 53	·0879
14. 59	·0883
15. 12	·0876
	***
16. 0	·0883
16. 30	·0873
17. 28	·0893
	***
18. 2	·0884
18. 13	·0887
18. 34	·0883
	***
18. 51	·0887
	***
19. 45	·0877
	***
20. 21	·0877
20. 32	·0871
20. 54	·0879
21. 4	·0873
21. 17	·0875
21. 52	·0841
22. 28	·0839
22. 43	·0853
22. 50	·0844
23. 3	·0851
23. 15	·0846
23. 59	·0853

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Apr.27	
h m	
0. 0	·02400
2. 52	{ ·02362 ·02203
6. 30	·02241
9. 6	·02203
11. 40	·02243
11. 51	·02202
12. 47	·02270
13. 15	·02261
13. 32	·02216
15. 20	·02192
16. 17	·02140
16. 42	·02162
23. 59	·02013
Apr.28	
0. 0	·02013
6. 50	·01708
9. 30	·01534
11. 13	·01500
13. 20	·01257
15. 43	·01528
20. 50	·01757
23. 59	·01730

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
Apr.27		
h m	°	°
1. 0	53 ·5	54 ·5
3. 0	55 ·0	55 ·0
9. 0	56 ·0	55 ·4
21. 0	52 ·0	53 ·0
Apr.28		
1. 0	55 ·0	55 ·0
3. 0	57 ·0	57 ·0
9. 0	59 ·0	59 ·0
21. 0	56 ·5	57 ·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁏ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr.29		Apr.29		Apr.29		Apr.29		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 36. 0	0. 0	·0853	0. 0	·01730	1. 0	61·0	61·2
	***		***	1. 52	·01677	3. 0	63·0	63·0
0. 28	38. 20	0. 29	·0854	3. 0	·01623	9. 0	62·0	63·0
0. 42	36. 30	0. 42	·0840	3. 47	·01500	21. 0	54·0	55·0
1. 3	42. 10	0. 57	·0865	4. 7	·01553			
	***	1. 12	·0847	4. 20	·01510			
2. 2	37. 10	1. 19	·0851	4. 47	·01668			
	***	1. 37	·0850	5. 0	·01602			
2. 30	43. 30		***	5. 33	·01677			
2. 37	41. 5	2. 26	·0873	5. 40	·01648			
2. 43	42. 15	2. 31	·0884	6. 10	·01690			
2. 56	40. 10	2. 37	·0876	6. 43	·01663			
3. 13	36. 5	2. 41	·0881	7. 13	·01690			
3. 28	34. 30	2. 47	·0874	7. 20	·01647			
3. 41	35. 50	2. 55	·0878	7. 36	·01736			
3. 47	42. 0	3. 14	·0858	8. 22	·01583			
3. 51	35. 5	3. 19	·0862	10. 9	·01600			
4. 4	42. 50	3. 24	·0857	10. 30	·01540			
4. 15	31. 0	3. 40	·0865	10. 54	·01543			
4. 20	38. 20	3. 45	·0895	11. 15	·01449			
4. 33	27. 15	3. 50	·0879		***			
4. 45	33. 45	3. 55	·0898	12. 26	·01502			
4. 50	34. 30	4. 6	·0883	13. 30	·01610			
4. 56	32. 5	4. 11	·0868	13. 47	·01418			
5. 5	37. 0	4. 18	·0901	15. 20	·01862			
5. 11	30. 15	4. 21	·0896	16. 17	·01939			
5. 19	39. 50	4. 32	·0916	16. 36	·02010			
5. 32	28. 10	4. 51	·0877	17. 0	·02009			
5. 45	27. 5	5. 6	·0890	18. 33	·02302			
5. 52	28. 10	5. 17	·0911	20. 43	·02491			
6. 8	24. 20	5. 27	·0878	23. 36	·02312			
6. 21	30. 10	5. 43	·0887		(†)			
6. 47	21. 55	5. 56	·0874					
6. 56	22. 50	6. 22	·0863					
7. 4	26. 20	6. 31	·0871					
7. 20	5. 10	6. 46	·0872					
7. 27	7. 45	7. 7	·0832					
7. 33	4. 15	7. 15	·0862					
7. 42	15. 0	7. 24	·0856					
7. 50	22. 15	7. 30	·0875					
7. 58	16. 5	7. 42	·0866					
8. 12	21. 50	7. 50	·0839					
8. 33	14. 0	7. 55	·0846					
8. 45	19. 30	8. 14	·0828					
9. 47	17. 55	8. 30	·0838					
9. 58	9. 20	8. 41	·0834					
	***		***					
10. 17	14. 5	9. 45	·0833					
10. 30	17. 40	9. 54	·0848					
10. 43	14. 10	10. 15	·0825					
11. 2	16. 5	10. 21	·0830					
11. 13	18. 50	10. 30	·0823					
11. 29	7. 45	10. 54	·0823					
11. 45	13. 50	11. 11	·0831					
	***	11. 23	·0827					
12. 36	14. 20	11. 39	·0843					
12. 43	15. 5	12. 11	·0819					
12. 51	14. 20	12. 32	·0841					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr.29		Apr.29						
h m	° ′ ″	h m						
13. 2	21. 15. 45	12. 45	·0844					
13. 7	14. 30	13. 4	·0872					
13. 15	15. 35	13. 13	·0857					
13. 19	46. 10	13. 19	·0869					
13. 41	28. 5	13. 31	·0829					
13. 50	26. 30	13. 59	·0867					
14. 4	29. 15	14. 7	·0854					
14. 42	18. 25	14. 12	·0863					
	***	14. 22	·0873					
			***					
15. 15	25. 30							
15. 32	25. 30	15. 11	·0870					
15. 58	28. 35	15. 59	·0883					
16. 15	25. 50	16. 15	·0869					
16. 32	32. 45	16. 29	·0882					
16. 58	26. 20	16. 47	·0889					
17. 15	27. 10	16. 54	·0885					
17. 47	22. 20	17. 42	·0879					
18. 11	24. 25	18. 4	·0867					
18. 28	29. 50	18. 23	·0869					
18. 47	30. 0	18. 32	·0875					
19. 0	26. 50	18. 53	·0873					
19. 8	27. 55	19. 4	·0877					
19. 20	26. 10	19. 15	·0870					
19. 36	27. 5	19. 28	·0872					
19. 52	23. 20	19. 52	·0865					
20. 9	27. 0	20. 9	·0872					
20. 20	25. 25		***					
20. 50	26. 5	20. 43	·0867					
20. 57	27. 10	20. 51	·0870					
	***	21. 25	·0863					
21. 53	26. 10	21. 40	·0868					
	***	21. 51	·0861					
22. 28	28. 20		***					
23. 59	28. 55	23. 31	·0860					
		23. 40	·0855					
		23. 50	·0856					
			(†)					
Apr.30		Apr.30		Apr.30		Apr.30		
0. 0	21. 28. 55	0. 0	·0851		(†)	1. 0	54·2	55·6
0. 30	28. 0	0. 30	·0854	0. 39	·02162	3. 0	56·0	56·0
0. 44	29. 5	0. 52	·0863	3. 6	·02143	9. 0	55·0	55·5
1. 56	27. 10	1. 50	·0861		·02041	21. 10	51·0	52·4
	***	2. 23	·0869	7. 46	·02002			
4. 38	25. 45	2. 51	·0870	10. 36	·02076			
	***	3. 16	·0878	12. 28	·02010			
5. 13	27. 5	3. 30	·0876	12. 42	·01984			
5. 42	26. 15	3. 58	·0879	13. 27	·02008			
6. 15	28. 40	4. 40	·0879	14. 59	·01949			
6. 27	27. 35		***		·01770			
	***	5. 22	·0894	19. 42	·01884			
10. 48	25. 45	5. 33	·0888	23. 59	·01822			
11. 11	24. 30	5. 49	·0886					
12. 9	25. 25	6. 10	·0891					
	***	6. 22	·0907					
12. 57	23. 55	6. 36	·0896					
13. 17	23. 55		***					
13. 22	25. 50	7. 36	·0903					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.30		Apr.30						
h m	° ′ ″	h m		h m		h m	°	°
13. 48	21. 23. 25	7. 52	·0897					
	***		***					
14. 43	23. 30	10. 44	·0901					
14. 50	21. 50	10. 58	·0905					
15. 11	23. 45	11. 14	·0897					
15. 16	22. 25		***					
16. 39	23. 0	12. 30	·0896					
16. 50	21. 50	12. 43	·0901					
16. 55	22. 50	12. 53	·0894					
17. 3	21. 35	13. 15	·0896					
17. 30	22. 5	13. 27	·0904					
18. 6	20. 0	13. 40	·0899					
18. 14	22. 10		***					
18. 21	19. 50	14. 11	·0896					
18. 33	21. 40	14. 25	·0900					
18. 45	21. 30	14. 44	·0901					
19. 10	18. 10	14. 56	·0894					
19. 23	19. 45	15. 13	·0899					
19. 46	19. 5	15. 37	·0895					
20. 47	21. 20	15. 45	·0897					
23. 8	26. 55	16. 28	·0896					
23. 20	29. 50	16. 35	·0899					
23. 32	29. 15	16. 44	·0896					
23. 40	30. 30		***					
23. 59	31. 10	18. 42	·0895					
		21. 45	·0877					
		22. 10	·0881					
		22. 52	·0879					
		23. 22	·0888					
		23. 29	·0885					
		23. 43	·0887					
		23. 59	·0883					
May 1		May 1		May 1		May 1		
0. 0	21. 31. 10	0. 0	·0883	0. 0	·01822	9. 0	56 ·0	56 ·2
	***	0. 47	·0877	1. 36	·01798	21. 0	51 ·3	52 ·0
1. 32	32. 45	1. 14	·0881	2. 56	·01784			
	***	1. 26	·0879	10. 0:	·01452			
2. 42	31. 30	2. 14	·0884	18. 54	·01839			
2. 51	32. 15	2. 30	·0894	23. 59	·01836			
3. 5	31. 15	2. 40	·0892					
3. 20	32. 0	2. 46	·0896					
3. 39	31. 10	3. 0	·0890					
3. 42	32. 5	3. 16	·0897					
3. 57	32. 10	3. 30	·0895					
4. 15	29. 35	3. 43	·0904					
4. 56	28. 30	3. 53	·0901					
5. 37	29. 25	4. 0	·0905					
5. 56	26. 40	4. 14	·0891					
8. 30	25. 5	4. 23	·0892					
11. 43	25. 5	4. 30	·0899					
12. 9	26. 10	4. 56	·0896					
13. 0	24. 30	5. 26	·0912					
13. 7	25. 30	5. 36	·0907					
13. 45	23. 45	5. 43	·0909					
16. 3	22. 30	5. 51	·0896					
16. 36	21. 25	6. 40	·0900					
	***	8. 56	·0895					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 1		May 1						
h m	° ′ ″	h m		h m		h m	°	°
18. 15	21. 22. 50	9. 18	·0897					
18. 52	21. 20	10. 18	·0897					
19. 13	19. 5	10. 45	·0900					
19. 30	21. 0	11. 26	·0897					
19. 47	19. 30	12. 22	·0901					
20. 2	21. 25	12. 53	·0899					
20. 11	20. 20	13. 15	·0902					
20. 19	21. 30	13. 42	·0897					
20. 38	21. 30	13. 56	·0899					
20. 50	23. 50	15. 0	·0897					
21. 39	23. 15	16. 44	·0902					
21. 57	25. 45	18. 49	·0895					
22. 23	25. 45	19. 25	·0897					
22. 38	27. 35	20. 41	·0876					
23. 59	31. 20	20. 52	·0879					
		22. 22	·0871					
		23. 8	·0880					
		23. 40	·0874					
		23. 59	·0876					
May 2		May 2		May 2		May 2		
0. 0	21. 31. 20	0. 0	·0876	0. 0	·01836	1. 0	55 ·0	55 ·0
0. 27	31. 0	0. 30	·0878	2. 8	·01752	3. 0	57 ·0	57 ·0
0. 52	33. 40	0. 51	·0885	10. 15:	·01071	9. 0	59 ·5	58 ·5
1. 3	32. 20	1. 0	·0879	19. 40	·01500	21. 0	53 ·0	53 ·5
1. 15	34. 5	1. 14	·0885	23. 59	·01632			
1. 33	31. 10	1. 30	·0869					
1. 58	32. 50	1. 45	·0872					
2. 40	27. 30	1. 59	·0884					
	***	2. 39	·0863					
3. 47	27. 25	2. 55	·0865					
4. 48	25. 0	3. 52	·0880					
6. 8	24. 35	4. 30	·0883					
6. 42	22. 10	4. 52	·0881					
7. 20	21. 20	5. 45	·0882					
9. 5	23. 30	6. 12	·0897					
9. 22	21. 55	6. 44	·0891					
9. 37	22. 40	7. 7	·0879					
10. 5	20. 45	7. 51	·0881					
11. 8	23. 35	8. 30	·0887					
11. 56	23. 35	9. 0	·0880					
12. 39	24. 10	9. 50	·0888					
	***	10. 15	·0885					
13. 36	25. 30	10. 43	·0887					
13. 53	28. 5	11. 42	·0885					
14. 42	23. 40	12. 15	·0891					
16. 43	21. 35	12. 43	·0886					
16. 56	22. 30	13. 12	·0894					
	***	13. 26	·0885					
18. 30	20. 45	13. 43	·0885					
	***	14. 7	·0892					
20. 39	21. 20	14. 51	·0891					
	***	16. 53	·0897					
23. 59	33. 25		***					
		19. 28	·0891					
			***					
		20. 42	·0880					
		22. 45	·0871					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		May 2						
h m	° ′ ″	h m		h m		h m	°	
		23. 22	·0875					
		23. 59	·0871					
May 3		May 3		May 3		May 3		
0. 0	21. 33. 25	0. 0	·0872	0. 0	·01632	1. 0	56·0	56·0
0. 29	31. 50	0. 30	·0880	2. 47	·01442	3. 0	59·0	59·0
1. 4	33. 15	0. 36	·0878	5. 3	·01120	9. 0	61·2	60·4
1. 40	30. 45	0. 47	·0886	9. 36	·01362	21. 0	52·5	53·0
2. 9	31. 40	0. 56	·0883	12. 2	·01441			
3. 28	27. 5	1. 7	·0884	20. 10	·02209			
3. 43	29. 30	1. 39	·0875	22. 56	·02288			
4. 11	23. 45	2. 21	·0891	23. 59	·02264			
	***	2. 45	·0890					
5. 13	23. 20	3. 2	·0897					
7. 42	24. 30	3. 31	·0896					
7. 58	25. 35	3. 44	·0909					
8. 29	24. 25	4. 5	·0919					
9. 27	25. 25	4. 36	·0895					
10. 18	23. 40	4. 44	·0897					
	***	5. 14	·0885					
10. 42	24. 50	6. 13	·0886					
11. 8	21. 5	6. 58	·0880					
11. 27	25. 0	7. 16	·0883					
11. 40	22. 35	7. 32	·0878					
12. 47	25. 30	8. 0	·0879					
13. 15	24. 10	8. 12	·0883					
13. 28	25. 45	8. 30	·0878					
13. 57	22. 35	9. 11	·0878					
16. 3	23. 10	9. 37	·0883					
17. 2	21. 5	9. 52	·0880					
	***	10. 43	·0886					
18. 43	22. 50	10. 54	·0885					
20. 3	20. 20	11. 14	·0906					
21. 27	23. 15	11. 40	·0889					
22. 55	30. 0	12. 6	·0883					
23. 59	33. 20	12. 15	·0885					
		12. 22	·0889					
		12. 42	·0885					
		12. 58	·0889					
		13. 6	·0887					
		13. 37	·0891					
		13. 53	·0889					
		16. 22	·0897					
		18. 41	·0897					
		20. 36	·0885					
		22. 0	·0870					
		22. 27	·0870					
		22. 44	·0865					
		23. 14	·0869					
		23. 35	·0867					
		23. 59	·0872					
May 4		May 4		May 4		May 4		
0. 0	21. 33. 20	0. 0	·0872	0. 0	·02264	1. 0	56·6	57·0
0. 48	32. 30	0. 54	·0884	1. 53	·02147	3. 0	61·0	61·0
1. 14	33. 50	1. 5	·0895	6. 9	·01368	9. 0	64·0	64·0
5. 17	22. 25	1. 58	·0881	8. 36	·01740	21. 0	53·0	54·0
7. 36	22. 25	2. 22	·0877	11. 47	·01871			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 4		May 4		May 4				
h m	° ′ ″	h m		h m		h m	°	
7. 57	21. 21. 50	4. 51	·0885	19. 20	·02819			
8. 26	22. 40	6. 41	·0881	22. 9	·02563			
9. 39	17. 45	8. 42	·0881	23. 59	·02504			
10. 42	22. 5	8. 53	·0886					
13. 15	24. 30	9. 43	·0877					
13. 29	26. 20	10. 7	·0884					
13. 42	25. 30	10. 22	·0880					
14. 15	24. 30	13. 13	·0894					
14. 40	26. 5	13. 36	·0900					
15. 12	23. 40	14. 14	·0899					
15. 26	24. 30	14. 44	·0905					
16. 27	23. 35	15. 45	·0905					
16. 44	22. 25	16. 26	·0911					
17. 45	29. 20	17. 25	·0904					
18. 30	26. 5	18. 29	·0910					
18. 57	30. 15	18. 52	·0903					
19. 18	28. 10	19. 13	·0909					
19. 47	25. 25	19. 35	·0905					
20. 2	22. 30	19. 52	·0908					
20. 13	22. 45	20. 49	·0896					
20. 28	21. 20	21. 11	·0897					
	***	21. 40	·0889					
21. 40	22. 30	22. 14	·0872					
21. 52	25. 20	22. 30	·0877					
22. 15	25. 30	23. 13	·0874					
23. 16	35. 30	23. 37	·0855					
23. 35	34. 25	23. 53	·0866					
23. 59	35. 35		(†)					
May 5		May 5		May 5		May 5		
	(†)		(†)	0. 0	·02504	1. 0	58·0	58·0
0. 17	32. 25	0. 27	·0871	0. 38	·02463	3. 0	61·0	61·2
1. 42	33. 5	0. 53	·0870	3. 39	·01642	9. 0	62·2	62·2
4. 47	23. 35	1. 0	·0875	8. 15	·01785	21. 0	52·0	52·[illegible]
5. 16	23. 20	1. 30	·0869	11. 36	·01873			
6. 10	20. 30	1. 43	·0871	15. 9	·0228[illegible]			
7. 3	21. 15	1. 52	·0869	18. 47	·02842			
7. 25	20. 10	2. 10	·0877	22. 21	·02433			
7. 53	21. 25	2. 15	·0873	23. 59	·02317			
8. 9	20. 40	2. 37	·0876					
9. 3	20. 35	2. 54	·0884					
10. 21	23. 20	3. 10	·0881					
10. 40	21. 25	3. 28	·0886					
10. 54	22. 45	3. 55	·0881					
11. 2	26. 20	4. 2	·0886					
11. 33	17. 0	4. 24	·0885					
	(†)	4. 43	·0891					
13. 32	22. 30	4. 54	·0889					
13. 58	21. 50	5. 10	·0892					
14. 18	25. 50		***					
14. 57	18. 25	5. 51	·0893					
15. 15	17. 25	6. 0	·0897					
15. 25	19. 40	6. 13	·0891					
16. 4	20. 20	6. 36	·0885					
16. 43	19. 5	6. 44	·0887					
16. 57	21. 50	6. 56	·0883					
17. 17	19. 0	7. 3	·0886					
17. 38	21. 15	7. 25	·0881					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 5		May 5						
h m	° ′ ″	h m		h m		h m	°	°
17. 50	21. 19. 30	7. 36	·0888					
18. 16	20. 10	7. 47	·0884					
18. 35	17. 5	8. 12	·0891					
19. 15	16. 0	8. 26	·0885					
19. 27	16. 25	8. 43	·0888					
19. 43	15. 30	8. 57	·0885					
19. 54	16. 45	9. 15	·0891					
20. 2	16. 20	9. 37	·0886					
20. 15	17. 35	10. 51	·0890					
20. 43	17. 20	11. 11	·0909					
21. 7	18. 30	11. 30	·0893					
21. 21	20. 35	11. 58	·0894					
20. 11	22. 15	12. 11	·0899					
23. 59	32. 20	12. 16	·0895					
		12. 57	·0898					
		13. 11	·0897					
		13. 28	·0899					
		13. 57	·0893					
		14. 13	·0893					
		14. 45	·0904					
		15. 5	·0907					
		15. 25	·0902					
		15. 37	·0907					
		15. 42	·0903					
		15. 45	·0906					
		16. 30	·0906					
		16. 53	·0911					
		17. 11	·0908					
		17. 30	·0910					
		18. 2	·0907					
		18. 45	·0898					
		19. 11	·0895					
		19. 39	·0897					
		20. 10	·0887					
		21. 39	·0872					
		23. 28	·0870					
		23. 59	·0866					
May 6		May 6		May 6		May 6		
0. 0	21. 32. 25	0. 0	·0866	0. 0	·02317	1. 0	58·8	59·0
0. 6	31. 15	0. 16	·0865	2. 8	·02051	3. 0	61·5	62·0
1. 0	34. 10	1. 0	·0879	4. 46	·01509	9. 0	63·0	63·5
1. 27	33. 20	1. 33	·0875	7. 17	·01783	21. 0	55·0	55·0
2. 5	34. 15	2. 4	·0887	10. 20	·01835			
3. 28	30. 25	2. 18	·0884	11. 53	·01943			
3. 43	30. 25	2. 33	·0887	18. 39	·02911			
4. 37	25. 30	2. 50	·0883	22. 15	·02587			
5. 26	24. 30	3. 45	·0911	23. 44	·02506			
5. 51	22. 15	4. 22	·0886	23. 59	·02462			
7. 25	20. 50	4. 39	·0898					
8. 27	17. 0	5. 11	·0903					
9. 8	20. 40	5. 22	·0908					
12. 50	21. 30	5. 45	·0895					
13. 26	21. 0	6. 22	·0904					
15. 3	19. 55	7. 22	·0910					
17. 25	16. 20	7. 36	·0903					
18. 58	16. 5	7. 43	·0906					
19. 37	15. 10	8. 7	·0891					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 6		May 6						
h m	° ′ ″	h m		h m		h m	°	°
19. 53	21. 12. 30	8. 30	·0903					
20. 2	14. 35	9. 0	·0900					
20. 15	15. 10	10. 5	·0900					
20. 37	13. 45	11. 52	·0907					
20. 46	16. 50	12. 11	·0911					
21. 20	17. 20	12. 21	·0908					
22. 44	23. 10	16. 33	·0921					
23. 30	27. 30	18. 42	·0918					
23. 48	27. 25	19. 9	·0913					
23. 59	29. 0	20. 27	·0908					
		21. 12	·0896					
		21. 54	·0895					
		22. 8	·0890					
		23. 12	·0893					
		23. 39	·0891					
		23. 59	·0896					
May 7		May 7		May 7		May 7		
0. 0	21. 29. 0	0. 0	·0896	0. 0	·02462	1. 0	61·0	61·2
0. 17	27. 55	0. 21	·0887	1. 50	·02277	3. 0	65·0	65·0
0. 38	28. 50	0. 44	·0885	5. 26	·01568	9. 0	67·0	66·8
0. 50	28. 20	0. 56	·0883	7. 17	·01762	22. 30	60·0	60·5
1. 5	28. 45	1. 43	·0892	11. 8	·01879			
1. 16	27. 45	2. 13	·0890	14. 4	·01900			
1. 45	29. 50	2. 40	·0897	17. 40	·02319			
2. 2	29. 10	3. 4	·0888	20. 36	·02538			
2. 45	30. 5	3. 37	·0907	23. 59	·02703			
3. 11	28. 10	4. 10	·0887					
3. 30	28. 15	4. 29	·0898					
4. 4	25. 30	4. 44	·0895					
6. 23	22. 20	4. 56	·0897					
6. 45	20. 20	5. 15	·0894					
7. 2	21. 15	5. 46	·0903					
7. 51	18. 25	6. 9	·0903					
8. 25	20. 5	6. 22	·0895					
8. 42	19. 30	6. 52	·0903					
8. 53	20. 45	7. 11	·0900					
9. 3	19. 35	7. 31	·0906					
9. 26	19. 35	8. 5	·0905					
9. 43	20. 40	8. 15	·0900					
10. 2	18. 45	8. 42	·0903					
11. 15	23. 10	8. 58	·0897					
11. 54	21. 5	9. 37	·0903					
13. 0	27. 50	9. 45	·0901					
14. 13	16. 20	10. 5	·0904					
14. 47	17. 5	10. 32	·0897					
15. 2	16. 10	10. 51	·0897					
16. 12	18. 35	10. 56	·0900					
16. 36	16. 50 ***	11. 23	·0897					
17. 14	22. 45 ***	11. 43	·0900					
17. 52	20. 20 ***	11. 59	·0899					
18. 20	21. 35 ***	12. 39	·0905					
19. 9	15. 0 ***	12. 49	·0904					
		13. 22	·0928					
		14. 7	·0908					
		14. 30	·0904 ***					
		15. 34	·0907					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 7		May 7						
h m	° ′ ″	h m		h m		h m	°	°
19. 50	21. 18. 50	16. 0	·0917					
20. 3	17. 30	16. 52	·0905					
21. 18	17. 10	17. 12	·0905					
	***	17. 55	·0911					
22. 21	19. 25		***					
23. 59	27. 5	19. 28	·0908					
		20. 15	·0899					
		20. 46	·0900					
		21. 11	·0895					
		21. 22	·0897					
		21. 44	·0892					
		21. 54	·0895					
		22. 6	·0891					
		22. 32	·0890					
		23. 59	·0895					
May 8		May 8		May 8		May 8		
0. 0	21. 27. 5	0. 0	·0895	0. 0	·02703	7. 30	65·2	65·5
0. 42	27. 55	0. 39	·0896	2. 40	·02787	21. 0	56·0	57·0
1. 13	29. 50	0. 53	·0905	10. 53	·02220			
3. 0	26. 0	1. 14	·0907	17. 54	·02933			
5. 10	24. 10	2. 4	·0895	19. 58	·02726			
5. 47	22. 35	2. 13	·0899	23. 13	·02368			
6. 18	23. 0	2. 30	·0894		(†)			
8. 10	21. 5	2. 43	·0899					
	***	4. 28	·0903					
9. 50	20. 25	4. 37	·0906					
10. 9	14. 10	4. 49	·0902					
10. 45	18. 50	5. 3	·0901					
11. 14	14. 35	5. 10	·0905					
11. 58	13. 20	5. 15	·0906					
12. 32	16. 30	5. 28	·0904					
12. 47	14. 35	5. 44	·0908					
13. 26	19. 50	6. 22	·0900					
13. 37	19. 10	6. 53	·0906					
13. 53	21. 30	7. 30	·0901					
14. 38	19. 30	8. 14	·0905					
14. 53	18. 45	8. 28	·0900					
15. 15	21. 30	10. 0	·0905					
15. 29	19. 35	10. 13	·0910					
16. 13	18. 10	10. 26	·0907					
16. 42	19. 45	10. 40	·0911					
17. 38	18. 5		***					
17. 42	19. 10	11. 43	·0905					
17. 50	17. 30	12. 0	·0897					
18. 3	19. 50	12. 36	·0901					
18. 37	18. 45	12. 58	·0897					
18. 46	20. 0	13. 24	·0904					
18. 53	18. 35	13. 59	·0898					
19. 10	12. 15	14. 58	·0900					
19. 22	19. 0	15. 13	·0907					
19. 36	17. 10	15. 24	·0905					
19. 50	20. 25	15. 52	·0907					
20. 7	19. 10	17. 13	·0903					
20. 20	16. 20	18. 10	·0909					
20. 28	17. 45	18. 21	·0904					
20. 32	16. 15	18. 54	·0902					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 8		May 8						
h m	° ′ ″	h m		h m				
21. 0	21. 21. 20	19. 13	·0896					
21. 26	19. 10	19. 52	·0899					
22. 10	24. 20	20. 22	·0893					
22. 36	24. 20	22. 58	·0882					
23. 9	28. 25	23. 15	·0888					
23. 22	28. 0	23. 29	·0880					
23. 59	33. 5		(†)					
May 9		May 9		May 9		May 9		
0. 0	21. 33. 5		(†)		(†)	1. [illegible]	[illegible]	[illegible]
0. 20	30. 30	0. 20	·0871	1. 10	·02085*	3. [illegible]	[illegible]	[illegible]
	***	0. 30	·0878	2. 40	·01836	9. [illegible]	[illegible]	[illegible]
0. 57	33. 20	0. 40	·0875	4. 51	·01382	21. [illegible]	[illegible]	[illegible]
1. 33	31. 15	0. 58	·0886		·01471			
1. 45	32. 20	1. 15	·0874	8. 48	·01329			
2. 3	30. 35	1. 36	·0873	11. 47	·01422			
2. 18	31. 25	1. 45	·0881	18. 40	·02146			
3. 25	28. 40	1. 58	·0879	20. 38	·02232			
	(†)	2. 18	·0891	21. 47	·02137			
5. 22	23. 10	2. 51	·0888		·02061			
5. 43	21. 5	3. 30	·0892	22. 36	·02059			
6. 8	22. 20	3. 56	·0904		·01920			
8. 27	21. 15	4. 29	·0921	23. 59	·01917			
9. 2	19. 30	5. 20	·0879					
9. 15	21. 20	5. 45	·0903					
9. 27	18. 45	6. 15	·0902					
9. 48	20. 30	6. 43	·0905					
10. 35	20. 30	6. 52	·0904					
12. 18	18. 45	7. 6	·0909					
13. 45	18. 5	7. 52	·0907					
14. 0	17. 5	8. 38	·0911					
15. 37	17. 0	9. 10	·0904					
17. 45	13. 30	9. 18	·0909					
19. 43	11. 25	9. 40	·0906					
21. 17	19. 10	9. 51	·0910					
	***	10. 18	·0904					
21. 43	19. 50	11. 28	·0907					
22. 15	22. 35	11. 33	·0913					
22. 30	20. 35	11. 51	·0906					
22. 36	22. 0	12. 6	·0905					
22. 45	20. 40	12. 15	·0913					
22. 56	23. 30	12. 22	·0909					
	***	14. 2	·0910					
23. 35	24. 5	14. 13	·0915					
23. 59	27. 20	14. 28	·0910					
		15. 39	·0907					
		17. 18	·0910					
		19. 15	·0904					
		19. 30	·0907					
			***					
		22. 28	·0897					
		22. 50	·0910					
		22. 59	·0906					
		23. 13	·0907					
		23. 21	·0903					
			(†)					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 10		May 10		May 10		May 10		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 27. 20		(†)	0. 0	·01917	1. 0	56·0	57·0
1. 15	26. 10	0. 21	·0912	0. 28	·01883	3. 0	57·8	58·5
2. 2	23. 35	0. 51	·0917		·01700	9. 0	59·2	60·0
2. 20	24. 30	1. 12	·0915	5. 30	·01694	21. 0	54·4	55·8
4. 6	21. 20	2. 45	·0934	7. 47	·01510			
4. 27	21. 30	3. 20	·0927	10. 29	·01477			
4. 50	19. 40	4. 27	·0929	14. 14	·01649			
6. 43	20. 0	4. 42	·0921	17. 3	·01830			
6. 58	19. 0	4. 59	·0919	20. 9	·01657			
7. 27	20. 15	5. 13	·0928	21. 30	·01496			
8. 42	19. 5	5. 28	·0925		·01381			
10. 25	19. 45	5. 36	·0927	22. 32	·01357			
10. 36	20. 35	5. 44	·0921		·01302			
10. 53	19. 30	5. 54	·0921	23. 16	·01263			
11. 42	19. 45	6. 11	·0927		·01207			
12. 16	18. 10	6. 51	·0927	23. 59	·01192			
12. 43	19. 10	7. 11	·0931					
13. 30	17. 15	7. 30	·0927					
13. 52	18. 5	8. 6	·0929					
14. 3	19. 10	10. 42	·0923					
14. 17	17. 50	11. 28	·0927					
18. 7	14. 15	12. 5	·0924					
	***	12. 14	·0919					
19. 13	13. 40	12. 30	·0926					
19. 20	14. 50	13. 28	·0925					
21. 28	17. 30	13. 34	·0922					
23. 43	24. 20	13. 50	·0921					
23. 59	24. 45	14. 11	·0929					
		14. 43	·0922					
		16. 58	·0925					
		18. 42	·0921					
		21. 10	·0908					
		21. 36	·0911					
		22. 11	·0906					
		22. 19	·0908					
		23. 59	·0912					
May 11		May 11		May 11		May 11		
0. 0	21. 24. 45	0. 0	·0912	0. 0	·01192	1. 0	56·0	57·0
0. 30	25. 20	0. 56	·0917	0. 33	·01183	3. 0	59·0	60·0
1. 52	24. 55	2. 4	·0910	2. 10	·01038	9. 0	63·3	64·0
3. 12	20. 25	3. 45	·0915	6. 0	·00663	21. 0	58·0	57·0
4. 56	18. 10	4. 5	·0913	7. 6	·00517			
5. 13	19. 30	4. 43	·0923	10. 6	·00684			
5. 30	18. 25	4. 55	·0921	13. 20	·00742			
6. 8	21. 10	5. 15	·0937	20. 43	·01482			
7. 55	21. 15	5. 55	·0912	23. 15	·01535			
8. 12	21. 50	7. 7	·0917	23. 59	·01501			
8. 20	21. 15	7. 22	·0915					
9. 50	20. 45	7. 56	·0917					
10. 6	19. 50	8. 12	·0913					
10. 48	21. 45	9. 43	·0918					
11. 16	20. 35	10. 7	·0914					
11. 45	21. 0	11. 0	·0920					
	***	11. 14	·0917					
12. 43	14. 5	11. 42	·0927					
13. 30	18. 10	11. 48	·0924					
13. 47	18. 40	12. 4	·0926					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 11		May 11						
h m	° ′ ″	h m		h m		h m	°	°
13. 59	21. 16. 35	12. 30	·0915					
	***	12. 42	·0917					
16. 13	17. 45	12. 49	·0915					
16. 30	19. 30	13. 0	·0920					
17. 5	18. 15	13. 15	·0914					
17. 57	10. 55	13. 45	·0911					
18. 9	14. 20	13. 55	·0914					
18. 25	11. 35	14. 22	·0912					
18. 45	15. 50	14. 28	·0915					
19. 24	12. 0	14. 54	·0913					
20. 37	14. 10	15. 52	·0920					
20. 48	16. 5	16. 28	·0909					
21. 0	15. 10	16. 50	·0923					
21. 41	18. 30	17. 22	·0929					
23. 3	31. 15	18. 15	·0917					
23. 59	33. 30	18. 30	·0909					
		19. 7	·0909					
		19. 32	·0891					
		19. 50	·0890					
		20. 40	·0883					
			(†)					
		22. 0	·0882					
		22. 12	·0883					
		22. 22	·0877					
		23. 15	·0873					
		23. 59	·0879					
May 12		May 12		May 12		May 12		
0. 0	21. 33. 30	0. 0	·0879	0. 0	·01501	1. 0	59·8	60·0
0. 47	34. 25	0. 45	·0901	0. 55	·01460	3. 0	62·7	63·8
3. 52	23. 10	1. 24	·0872	5. 50	·00703	9. 5	63·5	65·0
4. 5	24. 20	2. 6	·0880	6. 5	·00726	21. 0	57·0	57·0
4. 33	20. 15	2. 37	·0899		·00862			
	***	3. 0	·0901	11. 20	·00987			
5. 26	23. 10	3. 27	·0896	18. 10	·01872			
	***	3. 39	·0899	21. 19	·01524			
6. 19	20. 5	3. 45	·0895		·01460			
6. 40	21. 30	3. 56	·0901	23. 59	·01234			
7. 3	19. 15	4. 11	·0894					
7. 20	20. 20	4. 15	·0897					
7. 38	17. 15	4. 30	·0891					
8. 9	21. 50	4. 49	·0901					
8. 20	20. 45	5. 10	·0905					
9. 12	22. 40	5. 14	·0903					
10. 0	21. 10	5. 21	·0905					
10. 20	17. 0	5. 35	·0901					
10. 38	18. 5	5. 42	·0903					
10. 51	17. 20	5. 51	·0900					
11. 12	19. 10	5. 57	·0902					
11. 25	17. 50	6. 15	·0893					
13. 42	20. 30	6. 45	·0896					
14. 13	19. 0	7. 0	·0905					
14. 42	20. 25	7. 9	·0905					
15. 2	18. 10	7. 21	·0911					
15. 27	20. 5	7. 35	·0902					
15. 46	18. 15	7. 42	·0904					
16. 19	19. 20	8. 15	·0892					
18. 40	11. 0	8. 42	·0889					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
May 12	
h m	° ′ ″
18. 52	21. 11. 25
19. 12	10. 30
20. 24	12. 40
23. 17	33. 35
23. 59	35. 20
May 13	
0. 0	21. 35. 20
0. 45	35. 50
2. 3	33. 55
2. 34	30. 0
3. 12	27. 5
3. 45	26. 5
4. 38	19. 10
7. 8	20. 30
9. 9	23. 25
11. 16	22. 40
12. 43	24. 30
13. 15	23. 25
13. 46	23. 40
14. 12	21. 55
14. 44	21. 45
14. 57	20. 35
15. 15	21. 50
15. 39	20. 25
15. 51	21. 20
16. 23	17. 25
16. 55	18. 10
17. 50	13. 5
18. 17	13. 30
18. 45	15. 25
19. 17	12. 45
19. 40	14. 25
19. 51	11. 15
20. 15	14. 20
20. 52	14. 30
23. 17	28. 45
23. 59	29. 20
May 14	
0. 0	21. 29. 20
0. 28	31. 5
1. 50	29. 30
5. 15	21. 20
6. 43	21. 15
7. 12	20. 20
8. 7	22. 30
14. 18	22. 50
17. 43	18. 0
19. 0	15. 5
20. 27	14. 35
23. 59	31. 30
May 15	
0. 0	21. 31. 30
1. 20	33. 10
2. 30	32. 5
5. 5	25. 20
6. 9	23. 45
7. 12	23. 50
15. 36	20. 0
16. 37	17. 45
17. 25	15. 40
18. 40	14. 10
20. 29	13. 50
21. 38	16. 0
23. 59	27. 45
May 16	
0. 0	21. 27. 45
2. 25	29. 25
4. 20	25. 50
5. 43	24. 30
6. 15	23. 5
10. 20	19. 40
11. 27	20. 30
14. 50	18. 35
15. 15	19. 10
18. 28	12. 5
20. 11	11. 5
21. 7	13. 10
23. 59	27. 45

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
May 12	
h m	
9. 11	·0896
9. 54	·0895
10. 36	·0909
11. 28	·0895
	***
13. 45	·0909
13. 54	·0905
14. 40	·0910
14. 50	·0907
15. 45	·0910
16. 2	·0908
18. 15	·0915
19. 13	·0905
20. 45	·0899
	***
23. 37	·0871
23. 59	·0878
May 13	
0. 0	·0878
0. 25	·0874
0. 45	·0877
1. 0	·0875
1. 35	·0885
1. 55	·0885
2. 23	·0873
2. 30	·0876
2. 43	·0871
2. 55	·0870
3. 35	·0892
4. 13	·0882
4. 37	·0894
4. 50	·0901
5. 19	·0895
6. 13	·0899
6. 24	·0911
6. 50	·0913
7. 8	·0908
	***
9. 0	·0910
10. 29	·0916
13. 0	·0935
13. 24	·0932
14. 7	·0939
15. 0	·0931
15. 28	·0932
15. 52	·0941
16. 26	·0931
18. 25	·0930
18. 50	·0925
19. 0	·0927
19. 18	·0923
19. 30	·0930
19. 47	·0927
20. 11	·0930
20. 40	·0925
20. 59	·0927
22. 45	·0916
23. 2	·0920
23. 42	·0911
23. 59	·0912
May 14	
0. 0	·0912
0. 28	·0912
1. 2	·0902
2. 40	·0910
4. 43	·0915
4. 52	·0919
5. 16	·0917
5. 32	·0912
6. 32	·0909
7. 12	·0915
	***
8. 40	·0915
	***
14. 40	·0930
15. 52	·0935
20. 26	·0926
21. 11	·0916
22. 11	·0909
23. 59	·0918
May 15	
0. 0	·0918
0. 40	·0922
1. 28	·0932
2. 11	·0927
2. 51	·0935
5. 16	·0939
6. 9	·0928
8. 24	·0923
11. 5	·0925
14. 15	·0931
16. 15	·0931
19. 22	·0916
21. 0	·0910
21. 40	·0915
23. 59	·0925
May 16	
0. 0	·0925
0. 59	·0926
1. 13	·0932
1. 30	·0925
2. 45	·0932
3. 30	·0926
4. 15	·0927
5. 26	·0921
5. 51	·0924
6. 5	·0921
6. 51	·0924
7. 45	·0920
	***
13. 23	·0930
13. 33	·0934

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
May 13	
0. 0	·01234
1. 45	·01052
3. 20	·00481
6. 15	·00910
7. 45	·01112
10. 48:	·01280
16. 33	·02120
21. 48	·01309
23. 59	·01155
May 14	
0. 0	·01150
1. 36	·01017
4. 37	·00340
7. 46	·01177
9. 16	·01260 ·01358
11. 49	·01500
16. 30	·02220
17. 44	·02001 ·01945
21. 30	·01357 ·01264
23. 59	·01179
May 15	
0. 0	·01179
10. 50:	·00571
22. 32	·01167
23. 59	·01080
May 16	
0. 0	·01080
1. 7	·01045
9. 56:	·00531
21. 3	·01088
22. 56	·00870 [illegible]
23. 59	·00682

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
May 13		
1. 0	62·0	62·0
3. 0	65·0	66·0
9. 0	63·8	65·0
21. 0	54·0	55·0
May 14		
1. 0	[illegible]	60·0
3. 0	63·0	65·0
9. 0	65·0	66·0
21. 15	55·0	56·0
May 15		
8. 55	63·0	63·0
21. 0	57·0	58·0
May 16		
1. 0	[illegible]	60·0
3. 0	62·0	63·0
9. 0	64·5	[illegible]
21. 0	57·0	58·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		May 16						
h m	° ′ ″	h m		h m		h m	°	°
		14.42	·0932					
		15.45	·0937					
		19.11	·0930					
		19.24	·0926					
		19.52	·0925					
		20. 0	·0928					
		21.10	·0930					
		21.28	·0914					
		22. 7	·0909					
		22.59	·0908					
		23.59	·0912					
May 17		May 17		May 17		May 17		
0. 0	21.27.45	0. 0	·0912	0. 0	·00682	1. 0	59·0	59·7
0.40	29.40	0.43	·0916	5.47	·00677	3. 0	59·8	60·0
3.22	27.20	1. 9	·0915	9.10	·00581	9. 0	61·0	62·0
6.12	20.35	2.28	·0927	13.15	·00647	21. 0	57·8	58·2
8.20	18.45		***	17. 0	{ ·00779			
14.56	18.25	6.16	·0922		·00710			
17. 7	13.50	6.52	·0918	20.10	·00792			
17.21	12. 0	7. 0	·0921	22.37	·00806			
18. 5	11.10	7.39	·0911	23.59	·00737			
19.46	10.40	8.26	·0923					
20.13	11.35	9.10	·0925					
20.48	10.30	9.44	·0923					
21.30	11.15	10.10	·0926					
23.59	22. 0	10.39	·0925					
		11. 0	·0927					
		15. 0	·0925					
		15.27	·0928					
		18. 5	·0927					
		20.41	·0913					
		21. 6	·0913					
		22.30	·0899					
		22.44	·0901					
		23.15	·0894					
		23.23	·0896					
		23.51	·0892					
		23.59	·0895					
May 18		May 18		May 18		May 18		
0. 0	21.22. 0	0. 0	·0895	0. 0	·00737	1. 0	59·0	60·0
0.45	23.55	0.22	·0899	5.17	·00624	3. 0	60·5	61·0
1.50	24. 0	1. 2	·0901	10.59⁚	·00380	9. 0	63·0	64·0
2. 8	23. 5	1.45	·0897	20.13	{ ·00743	21. 0	58·8	59·8
2.20	24.20	2.39	·0905		·00718			
2.27	23.15	4.14	·0909	22.46	·00758			
2.43	24.35	4.45	·0916	23.59	·00583			
4.30	21.20	4.54	·0915					
5.48	20.20	7.26	·0923					
6.57	17.45	8.57	·0918					
9.46	18.10	9.19	·0920					
10. 3	17. 5	9.49	·0917					
16.28	14. 5	13.26	·0921					
19.17	7.50	14. 0	·0920					
19.40	6. 5	17.45	·0921					
19.52	6.30	19.51	·0908					
20. 3	5.15	20. 0	·0909					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 18		May 18						
h m	° ′ ″	h m		h m		h m	°	°
20.17	21. 7.10	21.43	·0896					
21. 0	8.20	22.15	·0897					
22.50	19.35	22.24	·0891					
23. 9	19.10	22.54	·0889					
23.55	25.50	23.25	·0900					
	(†)	23.44	·0914					
		23.59	·0914					
May 19		May 19		May 19		May 19		
	(†)	0. 0	·0914	0. 0	·00583	1. 0	61·0	61·7
0.50	21.33.20		(†)	4. 0	·00578	3. 0	63·0	64·0
1.16	33.50	1. 0	·0946*	5.13	·00629	9. 0	65·2	66·2
1.57	38.20	3. 7	·0941	7.40	·00281	21. 0	59·2	60·2
2. 5	37.25	3.19	·0902	13. 5	·00342			
2.20	39.10	3.28	·0906	21. 8	·00962			
2.32	37.30	3.32	·0896	22.10	·00978			
2.45	43.25	3.45	·0904		(†)			
2.53	41.25	3.57	·0896					
3.15	35.10	4.40	·0961					
3.23	36.15	5. 5	·0926					
3.37	36.50	5.11	·0929					
3.50	31.20	5.14	·0919					
4.18	33.55	5.18	·0922					
4.39	30.10	5.26	·0907					
4.43	33.50	5.39	·0917					
4.47	32. 5	5.49	·0913					
4.56	33. 0	5.57	·0907					
5. 7	26.30	6. 4	·0909					
5.38	18. 5	6.24	·0896					
5.50	21.10	6.57	·0898					
6.10	19. 5	7.22	·0888					
6.20	15. 0	7.44	·0894					
6.37	12.25	8. 0	·0893					
7. 8	18.10	8.30	·0868					
7.55	19.40	9. 7	·0869					
8.10	17.15	9.15	·0875					
8.15	19.40	9.30	·0872					
8.40	5.20	9.49	·0881					
9.14	12.15	10.10	·0880					
9.40	10.10	10.29	·0871					
10. 2	12. 5	11. 4	·0873					
10. 8	14.20	11.29	·0891					
10.40	12.10		***					
10.47	14.50	12.22	·0869					
11. 6	11. 0	13. 0	·0899					
11.23	14. 0	13.10	·0897					
11.30	10.20	13.15	·0901					
12.54	21. 5	13.33	·0895					
13.39	17.10		***					
17. 6	14.15	14.13	·0888					
17.50	15.40	15.36	·0885					
18.30	12.45	16.19	·0895					
	***	16.24	·0887					
20.12	12.30	16.40	·0889					
20.17	10.55	16.52	·0883					
20.43	13.25	17. 4	·0885					
22. 6	19.25	17.21	·0880					
23. 2	21.20		***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁚ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 19		May 19						
h m	° ′ ″	h m		h m		h m	°	°
23. 59	21. 30. 0	19. 3	·0882					
			***					
		21. 5	·0872					
		21. 45	·0860					
		22. 5	·0863					
		22. 10	·0859					
		22. 48	·0870					
		23. 27	·0881					
		23. 59	·0881					
May 20		May 20		May 20		May 20		
0. 0	21. 30. 5	0. 0	·0881		(†)	1. 0	61·0	61·5
1. 20	26. 10	0. 15	·0879	1. 0	·00885*	3. 0	62·0	63·0
2. 33	29. 0		(†)	3. 0	·00545*	9. 0	65·0	65·0
2. 57	28. 30	1. 0	·0882*	4. 15	·00656	21. 0	59·2	60·0
3. 15	25. 50	3. 0	·0895*	12. 20	·00770			
3. 32	26. 0	4. 10	·0904	12. 43	·00730			
3. 40	28. 5	5. 11	·0921	20. 54	·01302			
4. 37	23. 25	6. 11	·0905	23. 18	·01237			
5. 4	16. 30	6. 30	·0904		(†)			
5. 38	21. 50	7. 13	·0896					
5. 56	21. 5	7. 40	·0899					
6. 15	22. 30	7. 53	·0897					
6. 50	21. 25	8. 11	·0907					
7. 42	22. 0	8. 21	·0902					
8. 3	18. 5	8. 42	·0901					
8. 12	21. 10	8. 46	·0906					
9. 0	24. 50	9. 0	·0898					
9. 23	23. 0	9. 22	·0910					
9. 37	19. 10	9. 37	·0902					
10. 6	21. 5	9. 53	·0910					
10. 30	18. 35	10. 50	·0895					
10. 43	12. 30	11. 5	·0908					
10. 57	13. 55	11. 22	·0909					
11. 26	9. 50	11. 41	·0905					
12. 5	24. 10	12. 2	·0888					
13. 2	12. 15	12. 15	·0884					
13. 17	13. 40	12. 40	·0898					
13. 36	12. 55	12. 44	·0897					
14. 3	14. 10	13. 22	·0913					
14. 17	13. 5	13. 40	·0904					
15. 28	16. 0	13. 58	·0900					
16. 4	18. 20	14. 29	·0905					
16. 53	14. 15	14. 54	·0902					
17. 20	15. 45	15. 0	·0897					
17. 38	14. 5	15. 53	·0897					
17. 46	15. 5	16. 45	·0887					
18. 40	10. 10	17. 46	·0901					
18. 48	11. 0	18. 45	·0894					
19. 15	8. 10	19. 45	·0880					
20. 2	10. 30	21. 48	·0879					
20. 45	15. 25	22. 30	·0875					
23. 11	21. 40	22. 55	·0879					
	(†)	23. 8	·0878					
		23. 39	·0883					
			(†)					
May 21		May 21		May 21		May 21		
1. 0	21. 24. 57*	1. 0	·0884*	1. 0	·01260*	1. 0	61·0	61·0
3. 0	25. 49*	3. 0	·0890*	3. 0	·01202*	3. 0	62·8	63·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 21		May 21		May 21		May 21		
h m	° ′ ″	h m		h m		h m	°	°
9. 0	21. 16. 19*	9. 0	·0903*	9. 0	·01092*	9. 0	[illegible]	[illegible]
22. 20	19. 28*	22. 20	·0874*	22. 20	·01158*	22. 20	[illegible]	[illegible]
May 22		May 22		May 22		May 22		
0. 0	21. 25. 10	0. 0	·0884	0. 0	[illegible]	8. 30	62·2	62·2
0. 27	25. 35	0. 20	·0883	3. 6	·01065	21. 0	55·0	56·0
1. 13	30. 0	1. 10	·0902	11. 20	·00518			
1. 50	29. 5	1. 39	·0897	18. 30	·01084			
2. 0	30. 10	2. 0	·0897	19. 37	·00983			
2. 17	26. 10	2. 43	·0915	20. 8	·01010			
2. 53	24. 35	3. 16	·0915	21. 18	·00963 ·00800			
3. 20	27. 20	3. 51	·0911					
3. 50	28. 0	4. 11	·0901	23. 59	·00777			
4. 10	27. 10	4. 55	·0912					
4. 56	28. 30	5. 25	·0904					
5. 21	25. 20	5. 46	·0907					
5. 43	25. 0	6. 19	·0918					
6. 0	22. 25	6. 42	·0912					
6. 28	23. 5	7. 11	·0910					
6. 55	21. 30	7. 23	·0920					
7. 18	17. 15	8. 5	·0907					
8. 15	21. 25	8. 28	·0902					
10. 2	20. 0	8. 45	·0905					
10. 45	13. 10	9. 5	·0900					
11. 7	22. 20	9. 14	·0903					
12. 3	16. 10	9. 22	·0901					
12. 37	16. 30	9. 41	·0904					
12. 55	15. 50	9. 57	·0903					
14. 27	17. 45	10. 19	·0907					
17. 28	15. 30	10. 39	·0907					
19. 29	12. 20	10. 59	·0916					
21. 40	16. 10	11. 30	·0907					
22. 3	21. 20	11. 44	·0907					
22. 20	18. 55	12. 7	·0904					
23. 44	26. 20	12. 26	·0904					
23. 59	25. 45	12. 40	·0909					
		12. 52	·0905					
		13. 33	·0905					
		13. 50	·0900					
		14. 7	·0901					
		14. 15	·0905					
		14. 39	·0902					
		15. 18	·0906					
		15. 52	·0905					
		16. 30	·0895					
		18. 40	·0904					
		19. 28	·0901					
		20. 35	·0889					
		20. 54	·0889					
		21. 41	·0881					
		22. 44	·0890					
		23. 59	·0888					
May 23		May 23		May 23		May 23		
0. 0	21. 25. 45	0. 0	·0888	0. 0	·00777	1. 0	[illegible]	[illegible]
0. 15	25. 10	1. 56	·0887	1. 6	·00762	3. 0	[illegible]	64·0
	(†)	2. 24	·0882		(†)	9. 0	65·0	[illegible]
1. 0	27. 5*	2. 51	·0887	3. 0	·00404*	21. 0	58·0	[illegible]
1. 54	26. 40	3. 21	·0891	3. 45	·00480			
2. 10	25. 50	3. 52	·0887	3. 48	·00946			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

May 21. The Photographic Traces for the three Magnetometers were too faint for use.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 23		May 23		May 23				
h m	° ′ ″	h m		h m		h m	°	°
2. 38	21. 27. 55	4. 7	·0890	9. 6	·01384			
3. 27	27. 40		***	13. 35:	·01582			
5. 23	23. 50	5. 15	·0887	18. 4	·02152			
7. 19	22. 50	5. 37	·0895	23. 59	·01440			
7. 47	19. 40	6. 13	·0899					
9. 23	18. 35	6. 32	·0895					
10. 12	21. 25	6. 53	·0904					
13. 9	21. 30	7. 29	·0898					
13. 43	19. 30	7. 43	·0903					
14. 13	20. 25	8. 4	·0895					
15. 45	17. 40	8. 49	·0892					
16. 32	18. 20	10. 50	·0897					
19. 50	13. 5	11. 11	·0895					
21. 36	17. 45	11. 23	·0899					
23. 59	27. 20	12. 11	·0900					
		12. 32	·0896					
		13. 18	·0904					
		13. 44	·0903					
		14. 45	·0910					
		16. 6	·0907					
		16. 54	·0909					
		18. 10	·0908					
		19. 40	·0896					
		20. 12	·0895					
		20. 29	·0892					
		21. 45	·0895					
		22. 50	·0890					
		23. 59	·0889					
May 24		May 24		May 24		May 24		
0. 0	21. 27. 20	0. 0	·0889	0. 0	·01440	1. 0	64 ·0	64 ·2
0. 43	29. 15	0. 27:	·0893	1. 20	·01300	3. 0	68 ·0	68 ·2
2. 12	28. 25	1. 40	·0877	3. 37	·00718	9. 0	70 ·5	70 ·0
3. 56	24. 50	2. 53	·0882	7. 43	·01642	21. 0	62 ·5	61 ·5
6. 43	21. 55	3. 21	·0887	9. 17	·01730			
7. 26	21. 25	5. 50	·0885	13. 20:	·01869			
9. 40	22. 20	6. 53	·0908	18. 22	·02532			
13. 10	20. 40	7. 45	·0889	21. 56	·02180			
13. 40	21. 30	8. 13	·0887	23. 59	·02060			
15. 26	16. 30	10. 7	·0895					
20. 30	14. 5	11. 21	·0894					
22. 20	21. 25	12. 7	·0898					
23. 30	27. 30	12. 58	·0896					
23. 59	30. 20	16. 0	·0901					
		16. 40	·0898					
		17. 26	·0910					
		18. 10	·0913					
		22. 37	0881					
			(†)					
		23. 59	·0873					
May 25		May 25		May 25		May 25		
0. 0	21. 30. 20	0. 0	·0873	0. 0	·02060	1. 0	67 ·5	67 ·2
4. 33	22. 0	0. 50	·0879	1. 0	·01892	3. 0	70 ·0	70 ·0
6. 50	19. 30	1. 18	·0880	3. 24	·01351	9. 0	72 ·0	73 ·0
7. 44	20. 25	2. 50	·0890	4. 47	·01577	21. 0	64 ·0	64 ·0
8. 27	20. 10	3. 41	·0879	6. 36	·01762			
8. 54	21. 5	4. 33	·0892	12. 6:	·01847			
12. 50	21. 21. 55	4. 58	·0887	17. 45	·02718			
13. 12	23. 50	5. 30	·0891	22. 7	{ ·02462 ·02381			
13. 48	21. 25	5. 54	·0885	23. 59	·02271			
17. 3	16. 35	6. 36	·0890					
18. 25	19. 30	6. 45	·0889					
19. 42	17. 15	7. 33	·0889					
20. 59	17. 5	8. 57	·0897					
23. 59	27. 50	10. 21	·0905					
		12. 43	·0910					
		13. 22	·0909					
		15. 44	·0919					
		16. 26	·0918					
		16. 50	·0921					
		18. 11	·0911					
		19. 43	·0920					
		21. 30	·0901					
		23. 24	·0894					
		23. 32	·0899					
		23. 59	·0895					
May 26		May 26		May 26		May 26		
0. 0	21. 27. 50	0. 0	·0895	0. 0	·02271	1. 0	68 ·5	69 ·0
2. 11	30. 20	0. 26	·0893	3. 4	{ ·01806 ·01578	3. 0	71 ·0	71 ·5
4. 6	25. 45	0. 45	·0897	4. 40	·01347	9. 0	72 ·0	72 ·0
5. 37	23. 30	1. 22	·0898	5. 43	·01481	21. 0	63 ·5	63 ·0
8. 0	23. 0	2. 26	·0910	9. 52	·01509			
8. 45	22. 5	3. 40	·0905	12. 46:	·01764			
10. 2	21. 35	3. 55	·0907	17. 15	·02537			
10. 45	17. 50	4. 59	·0906	18. 15	·02500			
11. 8	20. 0	5. 34	·0899	20. 56	·02246			
12. 10	17. 50	6. 7	·0900	23. 16	·02037			
12. 27	19. 35	6. 38	·0905	23. 59	·01940			
15. 38	19. 25	7. 13	·0897					
17. 39	15. 20	9. 10	·0903					
19. 1	16. 10	10. 9	·0908					
19. 20	15. 20	10. 26	·0906					
19. 45	17. 5	11. 22	·0909					
20. 40	17. 40	11. 39	·0913					
21. 46	23. 25	12. 11	·0908					
	(†)	13. 42	·0911					
		16. 37	·0920					
		17. 36	·0918					
		18. 39	·0909					
		19. 7	·0911					
		20. 53	·0900					
		21. 33	·0903					
			(†)					
May 27		May 27		May 27		May 27		
1. 0	21. 29. 38*	1. 0	·0894*	0. 0	·01940	1. 0	67 ·0	67 ·0
3. 0	29. 22*	3. 0	·0905*	1. 30	·01696	3. 0	69 ·0	69 ·0
9. 0	24. 32*	9. 0	·0914*	4. 5	·01125	9. 0	70 ·0	71 ·5
21. 0	19. 14*	21. 0	·0939*	5. 22	{ ·01350 ·01443	21. 0	61 ·0	62 ·0
				7. 42	{ ·01460 ·01600			
				12. 15:	·01783			
				16. 40	·02519			
				23. 59	·01670			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

May 27. The Photographic Traces of the Declination and Horizontal Force Magnets were too faint for use.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
May 28		May 28		May 28		May 28		
h m	° ′ ″	h m		h m		h m	°	°
	(†)		(†)	0. 0	·01670	1. 0	63·0	64·8
0. 19	21. 28. 25	0. 58	·0902	0. 46	·01660	3. 0	66·0	67·0
1. 22	29. 30	3. 4	·0898		·01600	9. 0	69·0	69·0
2. 14	28. 10	3. 23	·0900	3. 42	·01477	22. 35	62·7	63·5
3. 45	27. 35	3. 45	·0898	10. 30:	·01030			
7. 3	24. 40	4. 21	·0900	20. 15	·01625			
9. 47	24. 40	5. 7	·0907	23. 59	·01440			
10. 30	22. 35	6. 30	·0905					
11. 6	23. 30	8. 12	·0907					
14. 23	22. 25	8. 27	·0909					
	***	9. 23	·0904					
15. 25	21. 15	9. 55	·0906					
	***	10. 30	·0901					
16. 13	22. 20	11. 19	·0909					
16. 42	17. 50	11. 27	·0904					
18. 15	18. 35	12. 5	·0903					
18. 27	17. 20	12. 28	·0907					
18. 38	18. 50	12. 42	·0904					
18. 47	16. 45	13. 22	·0903					
19. 11	20. 40	13. 45	·0907					
19. 45	21. 50		***					
20. 12	21. 15	15. 11	·0903					
20. 21	19. 10	16. 5	·0912					
20. 45	26. 25	19. 45	·0905					
21. 17	23. 50	20. 16	·0897					
	***	20. 27	·0903					
23. 30	31. 0	20. 54	·0898					
23. 59	32. 5	21. 13	·0902					
		21. 49	·0899					
		22. 11	·0904					
		22. 20	·0900					
		22. 31	·0902					
		23. 51	·0891					
		23. 59	·0894					
May 29		May 29		May 29		May 29		
0. 0	21. 32. 5	0. 0	·0894	0. 0	·01440	8. 7	67·0	68·0
	***	0. 10	·0890	1. 30	·01438	21. 0	64·0	65·0
1. 25	32. 35	1. 6	·0896	5. 45	·01278			
2. 40	31. 50	1. 21	·0902	8. 20	·01282			
3. 4	29. 20	1. 30	·0897	12. 0	·01430			
3. 15	31. 30	1. 41	·0902	12. 46	·01402			
3. 33	30. 5	2. 19	·0896	13. 17	·01421			
3. 42	31. 50	2. 40	·0922	14. 36	·01338			
3. 56	28. 35	2. 45	·0925	15. 0	·01366			
4. 13	27. 30	2. 59	·0896	20. 15	·00958			
4. 45	30. 0	3. 14	·0935	21. 37	·00860			
5. 50	25. 40	3. 31	·0924	22. 2	·00869			
7. 54	25. 30	3. 42	·0944	23. 59	·00744			
	***	4. 13	·0888					
8. 30	22. 25	4. 40	·0895					
9. 47	24. 30	5. 0	·0887					
10. 2	26. 10	5. 34	·0907					
10. 27	25. 25	5. 46	·0903					
10. 44	20. 40	5. 53	·0915					
10. 53	21. 0	6. 30	·0902					
11. 10	17. 45	7. 1	·0907					
11. 45	29. 45	7. 11	·0912					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
May 29		May 29						
h m	° ′ ″	h m		h m		h m	°	°
11. 56	21. 30. 30	7. 17	·0905					
12. 15	26. 5	8. 11	·0898					
12. 25	30. 20	8. 26	·0899					
13. 2	19. 30	8. 30	·0905					
13. 40	20. 0	8. 43	·0902					
13. 57	23. 0	8. 53	·0907					
14. 46	23. 5	9. 4	·0900					
15. 15	21. 30	9. 43	·0904					
15. 45	22. 35	9. 54	·0910					
16. 14	22. 10	10. 18	·0906					
	***	10. 49	·0895					
17. 10	23. 45	11. 3	·0903					
17. 17	22. 20	11. 20	·0904					
17. 24	23. 50	11. 42	·0897					
17. 51	20. 45	12. 12	·0911					
18. 14	23. 35	12. 39	·0894					
18. 33	23. 20	13. 11	·0903					
19. 17	15. 50		***					
19. 30	19. 45	15. 16	·0897					
19. 52	18. 30	16. 24	·0901					
20. 0	20. 50	16. 54	·0896					
20. 12	17. 0	17. 11	·0897					
20. 26	22. 10	17. 54	·0887					
20. 40	22. 5	18. 23	·0888					
21. 2	24. 15	19. 11	·0877					
21. 38	23. 30	19. 28	·0884					
21. 54	27. 10	20. 8	·0873					
23. 9	28. 40	20. 18	·0876					
23. 59	33. 25	21. 12	·0864					
		21. 40	·0871					
		23. 11	·0877					
		23. 30	·0884					
		23. 59	·0875					
May 30		May 30		May 30		May 30		
0. 0	21. 33. 25	0. 0	·0875	0. 0	·00744	1. 0	69·0	70·0
3. 57	27. 30	0. 44	·0868		(†)	3. 0	72·0	73·0
6. 22	21. 15	1. 13	·0872	1. 0	·00578*	9. 0	73·0	73·0
8. 13	22. 40	1. 43	·0865	3. 0	·00244*	21. 0	64·0	65·0
8. 56	18. 5	2. 19	·0873	5. 5	·00230			
9. 43	23. 20	3. 24	·0875	6. 56:	·00489			
13. 5	23. 20	3. 42	·0877	9. 27	·00611			
13. 37	25. 10	3. 53	·0874		·00852			
14. 2	24. 30	5. 35	·0884	11. 50	·00953			
14. 18	27. 45	6. 10	·0869	17. 26	·01600			
15. 3	26. 30	6. 45	·0880	23. 16	·00817			
15. 48	22. 15	7. 19	·0882		·00772			
18. 4	17. 25	7. 55	·0890	23. 59	·00774			
18. 47	16. 50	9. 24	·0884					
19. 0	17. 50	13. 38	·0895					
19. 13	16. 0	14. 18	·0894					
21. 0	18. 25	14. 40	·0898					
22. 37	28. 45	15. 0	·0896					
23. 59	34. 20	16. 52	[illegible]					
		17. 45	·0893					
		18. 43	·0891					
		22. 11	·0875					
		22. 50	·0878					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		May 30						
h m	° ′ ″	h m		h m		h m	°	°
		23. 18	·0889					
		23. 59	·0887					
May 31		May 31		May 31		May 31		
0. 0	21. 34. 20	0. 0	·0887	1. 0	·00683*	1. 0	67 ·0	68 ·0
2. 53	29. 30	0. 41	·0890	3. 0	·00464*	3. 0	70 ·0	71 ·0
5. 15	23. 25	1. 8	·0897	9. 0	·00000*	9. 0	70 ·5	72 ·2
6. 30	21. 30	3. 51	·0889	21. 0	·00581*	21. 0	62 ·0	63 ·0
14. 27	23. 50	4. 16	·0894					
14. 50	25. 5	4. 48	·0892					
15. 17	23. 10	5. 33	·0897					
15. 38	24. 5	5. 58	·0902					
	***	9. 0	·0898					
17. 56	17. 10	10. 14	·0901					
20. 25	17. 35	16. 12:	·0915					
21. 41	23. 0	17. 53:	·0910					
23. 42	33. 55	20. 45	·0890					
23. 59	33. 30	21. 43	·0886					
		23. 59	·0885					
June 1		June 1		June 1		June 1		
0. 0	21. 33. 30	0. 0	·0885		(†)	1. 0	66 ·0	67 ·0
2. 3	32. 45	0. 51	·0891	1. 0	·00078*	3. 0	69 ·0	69 ·5
5. 56	22. 50	1. 16	·0888	3. 0	·00130*	9. 0	71 ·0	72 ·2
15. 47	24. 0	2. 28	·0892	4. 2	·00321	21. 0	64 ·0	65 ·0
16. 18	25. 20	3. 5	·0901	7. 43:	·00903			
18. 9	18. 15	3. 20	·0898	11. 14	·01017			
19. 30	16. 5	3. 37	·0899	18. 0	·01709			
21. 2	20. 0	3. 52	·0892	22. 4	·01157			
23. 59	30. 25	4. 51	·0890	23. 59	·01084			
		5. 25	·0894					
		5. 51	·0884					
		6. 21	·0892					
		6. 50	·0886					
		7. 40	·0891					
		8. 22	·0888					
		11. 33	·0898					
		12. 12	·0904					
			***					
		17. 40	·0915					
		19. 0	·0910					
			***					
		21. 50	·0891					
		22. 6	·0893					
		22. 45	·0887					
		23. 59	·0887					
June 2		June 2		June 2		June 2		
0. 0	21. 30. 25	0. 0	·0887	0. 0	·01084	1. 0	68 ·0	69 ·0
0. 47	32. 10	0. 30	·0881	3. 59	·00908	3. 0	69 ·8	70 ·0
3. 41	29. 5	1. 56	·0891	8. 28:	·00556	9. 0	68 ·0	68 ·5
5. 13	23. 30	2. 54	·0901	19. 8	·01193	21. 0	65 ·0	66 ·0
	***	3. 28	·0890	21. 40	·01002			
7. 48	20. 15	4. 0	·0895	23. 45	·00930			
	***	4. 57	·0903		(†)			
10. 20	24. 30	5. 21	·0913					
11. 23	24. 35	5. 30	·0909					
11. 56	21. 50	5. 44	·0914					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 2		June 2						
h m	° ′ ″	h m		h m		h m	°	°
15. 40	21. 21. 25	7. 17	·0906					
18. 0	16. 0	7. 37	·0915					
20. 10	15. 10	8. 0	·0914					
21. 5	17. 35	8. 21	·0905					
23. 22	28. 50	11. 21	·0909					
23. 59	29. 35	11. 58	·0913					
		12. 33	·0908					
		14. 54	·0908					
		17. 15	·0911					
		19. 4	·0906					
		20. 55	·0890					
		23. 40	·0881					
		23. 59	·0883					
June 3		June 3		June 3		June 3		
0. 0	21. 29. 35	0. 0	·0883		(†)	1. 0	68 ·0	68 ·8
2. 9	30. 10	0. 50	·0889	0. 42	·00768	3. 0	69 ·5	70 ·0
	***	2. 19	·0889	10. 22:	·00200	9. 0	71 ·5	72 ·2
4. 53	24. 20	3. 0	·0899	21. 15	·00718	21. 0	66 ·0	67 ·0
6. 57	23. 5	4. 29	·0903	22. 24	{·00852			
8. 26	24. 20	4. 41	·0909		·00677			
13. 8	22. 25	5. 59	·0913	23. 5	·00677			
13. 43	19. 10	6. 12	·0919		(†)			
13. 57	18. 40	6. 50	·0903					
14. 26	17. 5	7. 11	·0905					
14. 44	17. 30	7. 25	·0898					
14. 55	16. 15	7. 43	·0905					
	***	8. 30	·0898					
17. 0	15. 30	9. 24	·0899					
17. 6	17. 0	10. 15	·0895					
17. 12	12. 10	10. 51	·0896					
17. 18	14. 50	11. 6	·0905					
17. 25	11. 15	11. 15	·0902					
17. 43	16. 25	12. 39	·0903					
	***	13. 11	·0913					
18. 11	15. 20	13. 45	·0910					
	***	14. 0	·0911					
18. 42	17. 20	14. 30	·0903					
19. 4	16. 20		***					
	***	16. 53	·0907					
21. 29	20. 45	17. 4	·0911					
22. 13	28. 20		***					
22. 40	32. 45	19. 49	·0892					
22. 56	34. 20	21. 43	·0859					
23. 12	33. 30	22. 0	·0865					
	(†)	22. 17	·0861					
		22. 27	·0865					
		22. 40	·0858					
		22. 54	·0861					
			(†)					
June 4		June 4		June 4		June 4		
	(†)		(†)		(†)	1. 0	70 ·3	71 ·4
1. 0	21. 35. 22*	1. 0	·0870*	1. 0	·00192*	3. 0	73 ·0	74 ·0
3. 0	32. 15*	3. 0	·0896*	3. 0	·00031*	9. 0	75 ·0	75 ·4
6. 3	25. 10	6. 2	·0895	6. 5	·00781	22. 0	68 ·0	69 ·3
8. 30	22. 30	6. 39	·0896	8. 32	·01070			
9. 4	20. 10	6. 47	·0908	14. 26	·01409			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

May 31. The Photographic Trace of the Vertical Force Magnet was too faint for use.

Greenwich Mean Solar Time.	Western Declination.
June 4	
h m	° ′ ″
9. 10	21. 22. 5
9. 26	20. 45
9. 48	23. 30
10. 17	22. 25
10. 29	24. 20
11. 33	23. 20
11. 56	25. 10
12. 15	22. 50
12. 22	24. 45
12. 26	23. 5
13. 1	27. 30
13. 45	18. 20
14. 3	24. 25
14. 30	19. 35
	***
19. 23	14. 50
19. 55	15. 0
20. 30	16. 30
21. 33	15. 45
23. 59	25. 40
June 5	
0. 0	21. 25. 40
	***
1. 17	29. 35
2. 18	31. 25
5. 30	24. 10
6. 54	22. 20
8. 40	24. 5
9. 38	22. 10
9. 56	23. 15
10. 16	21. 45
	***
11. 9	23. 30
12. 17	26. 20
14. 40	21. 20
15. 15	22. 45
16. 6	21. 50
16. 40	23. 50
17. 30	20. 25
	***
19. 13	20. 10
22. 37	22. 30
23. 59	29. 15
June 6	
0. 0	21. 29. 15
1. 6	29. 40
1. 57	32. 50
7. 38	24. 30
	***
10. 18	23. 5
10. 40	20. 20
	***
11. 2	24. 5
11. 56	21. 30
13. 10	21. 45
13. 26	20. 20
June 6	
h m	° ′ ″
13. 50	21. 20. 0
14. 17	21. 35
15. 6	19. 40
	***
17. 45	20. 55
19. 14	15. 0
20. 25	15. 15
21. 28	17. 10
23. 59	25. 50
June 7	
0. 0	21. 25. 50
2. 13	30. 15
6. 42	23. 30
10. 13	23. 30
10. 37	25. 15
11. 6	24. 10
12. 23	24. 10
12. 46	27. 0
13. 15	24. 20
14. 17	23. 25
14. 50	21. 35
17. 47	24. 10
19. 21	18. 5
19. 37	8. 10
19. 53	21. 30
20. 3	16. 15
20. 20	23. 45
20. 38	12. 10
20. 50	31. 25
21. 7	13. 15
21. 23	25. 35
	***
21. 43	27. 0
21. 50	23. 20
	***
22. 6	29. 30
22. 20	26. 40
22. 27	33. 50
	***
22. 52	32. 30
23. 12	39. 25
23. 50	29. 10
23. 59	39. 45

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature
June 4	
h m	
7. 21	·0907
7. 52	·0897
8. 15	·0900
8. 30	·0896
9. 48	·0905
9. 59	·0901
10. 15	·0900
10. 30	·0909
10. 53	·0906
	(†)
June 5	
	(†)
1. 53	·0890
2. 0	·0887
	***
3. 21	·0883
3. 30	·0891
3. 45	·0884
4. 45	·0894
5. 50	·0908
	(†)
June 6	
	(†)
1. 0	·0894*
1. 45	·0884
2. 4	·0892
2. 50	·0879
3. 21	·0897
4. 1	·0889
4. 27	·0902
4. 50	·0897
5. 4	·0903
5. 40	·0896
7. 11	·0901
June 6	
h m	
7. 18	·0910
7. 35	·0900
8. 0	·0905
8. 30	·0897
8. 42	·0899
8. 51	·0893
9. 7	·0902
9. 45	·0894
10. 36	·0897
10. 51	·0906
11. 11	·0897
11. 40	·0891
13. 14	·0899
13. 26	·0896
14. 50	·0902
15. 45	·0898
16. 40	·0907
19. 30	·0903
22. 11	·0879
22. 54	·0876
23. 50	·0880
23. 59	·0877
June 7	
0. 0	·0877
0. 44	·0872
1. 5	·0879
2. 0	·0885
2. 14	·0883
3. 21	·0887
3. 34	·0894
3. 54	·0888
4. 40	·0892
4. 54	·0884
5. 12	·0891
6. 14	·0881
7. 0	·0890
7. 14	·0887
7. 29	·0891
8. 54	·0884
9. 51	·0885
10. 30	·0891
11. 4	·0887
12. 45	·0897
13. 37	·0894
14. 6	·0900
16. 7	·0897
17. 45	·0906
18. 3	·0900
18. 11	·0903
19. 40	·0882
19. 54	·0869
20. 10	·0881
20. 13	·0885
20. 32	·0841
20. 51	·0870
21. 4	·0853
21. 21	·0874

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
June 4	
h m	
20. 7	·00912
22. 25	·01762 ·01620
23. 42	·01603 ·01552
23. 59	·01551
June 5	
0. 0	·01551
2. 37	·01500
8. 35	·01071
15. 52	·01593
21. 13	·00980
23. 59	·00856
June 6	
0. 0	·00856
2. 5	·00750
10. 27:	·00093
20. 55	·00920
22. 36	·00850 ·00809
23. 59	·00793
June 7	
h m	
0. 0	·00793
1. 35	·00748 ·00620
6. 30	—·00084
9. 24	·00269
13. 17	·00468
19. 50	·01234
20. 17	·01254
20. 33	·01180
20. 46	·01203
21. 8	·01144
21. 36	·01143
23. 59	·00938

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 4		
h m	°	°
June 5		
9. 0	72·8	73·2
21. 0	65·0	66·8
June 6		
1. 0	69·0	70·0
3. 0	73·0	73·0
9. 30	72·5	73·0
21. 0	65·8	66·8
June 6		
h m		
June 7		
1. 0	68·0	69·0
3. 0	71·0	72·0
9. 0	74·0	74·0
21. 0	65·8	67·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

June 4. From 11h it is supposed that the free motion of the Horizontal Force Magnet was impeded.

June 5. From 6h the free motion of the Horizontal Force Magnet was supposed to have been impeded by the copper bar.

Greenwich Mean Solar Time.	Western Declination.
h m	° ′ ″
June 8	
0. 0	21. 39. 45
0. 6	37. 50
0. 12	39. 45
0. 30	35. 0
0. 47	33. 35
	***
1. 22	34. 50
	***
2. 3	29. 20
2. 14	24. 50
	***
2. 27	23. 15
2. 35	16. 10
2. 40	22. 45
2. 57	38. 0
3. 10	34. 55
3. 14	38. 50
3. 23	35. 5
3. 29	38. 45
3. 38	34. 10
	***
3. 50	45. 0
	***
4. 20	36. 50
	***
5. 37	38. 15
5. 45	41. 50
6. 15	28. 0
7. 6	12. 45
7. 24	19. 5
7. 30	16. 20
7. 36	20. 5
7. 42	17. 10
7. 47	23. 0
8. 28	25. 50
	***
9. 7	26. 10
9. 39	22. 50
9. 58	26. 20
	***
11. 15	23. 15
11. 26	21. 20
11. 43	23. 5
11. 53	21. 0
12. 0	23. 5
	***
13. 15	21. 45
14. 12	20. 20
14. 35	21. 25. 5
15. 6	22. 30
15. 15	23. 35
15. 27	21. 20
15. 43	29. 50
15. 47	27. 10
16. 3	45. 0
16. 36	22. 50
16. 42	26. 5
17. 13	15. 30
	***
17. 37	24. 10
17. 43	20. 15
18. 4	32. 50
18. 15	27. 5
18. 30	27. 35
18. 42	23. 10
18. 57	32. 50
19. 8	28. 0
19. 21	24. 20
19. 30	27. 50
	***
20. 6	28. 25
	***
20. 45	22. 40
	***
22. 12	27. 50
	***
22. 56	32. 30
23. 8	31. 45
23. 14	34. 40
23. 59	35. 10
June 9	
0. 0	21. 35. 10
	***
1. 56	35. 15
	***
3. 37	30. 10
4. 4	25. 0
	***
5. 15	27. 35
6. 14	25. 10
6. 27	27. 0
7. 9	23. 35
9. 45	26. 5
10. 44	22. 30
11. 7	25. 5
11. 30	24. 10
11. 45	27. 15
12. 13	24. 45
12. 40	25. 50
13. 6	23. 0
13. 50	24. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
June 7	
h m	
21. 40	·0865
22. 0	·0881
22. 15	·0870
22. 27	·0890
22. 52	·0867
23. 11	·0880
23. 36	·0871
	(†)
June 8	
	(†)
0. 30	·0880
0. 59	·0855
2. 6	·0940
2. 14	·0894
2. 40	·1004
3. 7	·0843
3. 15	·0854
3. 25	·0845
3. 31	·0875
3. 37	·0864
3. 43	·0883
3. 46	·0877
3. 56	·0911
4. 2	·0903
4. 7	·0922
4. 14	·0867
4. 17	·0872
4. 30	·0888
4. 46	·0919
4. 51	·0909
5. 12	·0920
5. 29	·0909
5. 40	·0914
5. 53	·0964
6. 11	·0872
6. 14	·0884
6. 16	·0874
6. 30	·0956
6. 47	·0878
7. 4	·0918
7. 14	·0926
7. 19	·0913
7. 29	·0856
7. 44	·0884
7. 54	·0879
8. 18	·0891
8. 42	·0887
8. 54	·0895
9. 12	·0883
9. 23	·0893
9. 39	·0879
9. 50	·0890
10. 11	·0895
10. 32	·0886
11. 0	·0885
11. 15	·0890
11. 33	·0873
11. 45	·0880
11. 55	·0877
12. 11	·0884
12. 42	·0877
13. 7	·0886
	***
14. 10	·0882
14. 29	·0897
	***
15. 37	·0896
16. 5	·0861
16. 12	·0866
16. 18	·0856
16. 30	·0864
16. 52	·0881
17. 11	·0865
17. 37	·0876
17. 50	·0869
17. 55	·0874
18. 11	·0861
18. 28	·0838
18. 41	·0855
18. 55	·0839
19. 11	·0853
19. 14	·0847
19. 44	·0853
	***
20. 11	·0835
	***
21. 39	·0859
22. 19	·0861
23. 5	·0850
23. 13	·0865
23. 42	·0845
23. 54	·0852
23. 59	·0850
June 9	
0. 0	·0850
0. 16	·0842
0. 45	·0854
1. 43	·0856
1. 56	·0865
2. 20	·0857
3. 11	·0875
3. 30	·0864
4. 0	·0893
4. 36	·0890
4. 52	·0897
5. 10	·0891
	***
6. 7	·0891
6. 26	·0904
6. 40	·0883
	***
7. 16	·0888
	***
7. 29	·0882
	***

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
June 8	
0. 0	·00938
2. 6	·00677
2. 18	·00743
	***
4. 12	·00260
	***
6. 40	·01122
	***
8. 30	·01276
11. 4	·01341
13. 45	·01620
15. 30	·01852
16. 3	·01852
16. 25	·01764
16. 56	·01862
17. 4	·01830
17. 30	·01860
18. 25	·01708
23. 59	·01322
June 9	
0. 0	·01322
1. 47	·01336
9. 5:	{ ·00560 ·00639
18. 28	·01432
22. 14	·00992
23. 59	·00907

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
June 8		
1. 0	72·0	72·0
3. 0	75·0	75·0
9. 0	74·0	75·0
21. 0	65·0	67·0
June 9		
1. 0	68·0	69·0
3. 0	70·5	71·0
9. 0	72·5	73·2
21. 0	63·0	64·5

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
June 9		June 9						
h m	° ′ ″	h m		h m		h m	°	°
15. 22	21. 20. 45	8. 15	·0883					
			***					
17. 43	20. 40							
18. 15	18. 50	8. 28	·0891					
	***		***					
21. 33	20. 10	9. 5	·0883					
			***					
23. 59	30. 10							
		11. 11	·0882					
			***					
		15. 10	·0892					
			***					
		16. 48	·0885					
			***					
		17. 42	·0891					
			***					
		20. 20	·0876					
			***					
		23. 14	·0871					
		23. 59	·0876					
June 10		June 10		June 10		June 10		
0. 0	21. 30. 10	0. 0	·0876	0. 0	·00907	1. 0	65 ·0	66 ·0
1. 56	29. 30	1. 45	·0882	1. 45	·00832	3. 0	68 ·0	69 ·0
6. 20	21. 55	3. 0	·0893	9. 24:	·00183	9. 0	69 ·0	70 ·0
7. 47	25. 20	4. 11	·0887	21. 9	·00882 ·00840	21. 8	64 ·0	65 ·0
11. 43	24. 45	5. 40	·0889					
	***	6. 51	·0895	23. 59	·00741			
18. 21	17. 30		***					
18. 39	19. 10	11. 45	·0900					
18. 58	18. 0	13. 15	·0905					
19. 15	19. 50	14. 38	·0901					
19. 30	16. 30	16. 27	·0904					
19. 42	19. 25	20. 30	·0883					
	***		***					
20. 42	19. 25	23. 16	·0888					
21. 45	21. 25	23. 30	·0895					
23. 59	30. 30	23. 59	·0890					
June 11		June 11		June 11		June 11		
0. 0	21. 30. 30	0. 0	·0890	0. 0	·00741	1. 0	66 ·0	67 ·0
1. 40	31. 40	0. 55	·0889	1. 40	·00730	3. 0	68 ·0	68 ·8
2. 27	29. 25	1. 50	·0895	10. 15:	·00068	9. 0	70 ·7	71 ·2
3. 7	29. 30	2. 18	·0878	20. 6	·00609	22. 15	66 ·0	67 ·0
5. 3	24. 35		***	23. 59	·00641			
	***	4. 40	·0897					
13. 26	23. 40		***					
14. 40	27. 15	9. 28	·0896					
18. 45	15. 20	10. 27	·0890					
	***	14. 30	·0893					
20. 17	20. 5	14. 57	·0898					
22. 13	22. 10	15. 42	·0895					
23. 59	27. 50	17. 15	·0899					
		19. 37	·0882					
		21. 0	·0881					
		21. 54	·0875					
		23. 15	·0877					
		23. 59	·0887					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
June 12		June 12		June 12		June 12		
h m	° ′ ″	h m		h m		h m		
0. 0	21. 27. 50	0. 0	·0887	0. 0	·00641	9. 31	67 ·4	68 ·8
1. 0	29. 30	0. 30	·0893	4. 35	·00572	21. 0	64 ·0	65 ·0
5. 4	23. 15	0. 45	·0888	6. 30	·00621			
7. 42	21. 50	1. 7	·0897	11. 36	·00657			
12. 23	25. 45	1. 27	·0895	14. 36	·00774 ·00520			
13. 45	24. 50	1. 41	·0897					
14. 30	26. 0	2. 29	·0888	18. 17	·00701			
14. 45	24. 5	2. 46	·0890	20. 54	·00743			
19. 4	17. 30	3. 5	·0900	23. 59	·00643			
20. 45	20. 25	3. 15	·0895					
23. 59	32. 10	3. 57	·0903					
		4. 13	·0898					
		4. 58	·0905					
		6. 11	·0904					
		6. 33	·0908					
		9. 40	·0903					
		12. 40	·0908					
		13. 27	·0906					
		14. 14	·0909					
		14. 25	·0914					
		14. 36	·0911					
		16. 57	·0909					
		18. 51	·0897					
		21. 43	·0887					
		23. 59	·0885					
June 13		June 13		June 13		June 13		
0. 0	21. 32. 10	0. 0	·0885	0. 0	·00643	1. 0	67 ·0	67 ·8
1. 50	31. 35	2. 7	·0883	2. 2	·00541	3. 0	[illegible]	[illegible]
6. 30	23. 20	2. 51	·0889	4. 45	·00212	9. 0	73 ·0	73 ·0
14. 53	22. 45	6. 0	·0882	6. 6	—·00039	21. 0	61 ·0	62 ·0
18. 51	17. 20	6. 45	·0887	9. 18	·00420			
20. 15	17. 15	7. 55	·0884	14. 8	·00700			
23. 12	28. 30	9. 36	·0887	20. 10	·01485			
23. 59	29. 40	10. 40	·0883	23. 13	·01124			
		16. 51	·0895	23. 59	·01092			
		19. 7	·0895					
		22. 45	·0878					
		23. 59	·0882					
June 14		June 14		June 14		June 14		
0. 0	21. 29. 40	0. 0	·0882	0. 0	·01092	1. 0	63 ·5	64 ·5
2. 50	30. 5	2. 0	·0888	1. 30	·01024	3. 0	66 ·0	67 ·0
5. 56	23. 10	2. 50	·0897	8. 20:	·00204	9. 0	67 ·0	68 ·2
11. 45	22. 30		***	21. 4	·01182	21. 0	61 ·8	62 ·0
13. 12	24. 0	5. 7	·0893	23. 59	·00958			
17. 8	20. 25	6. 41	·0891					
18. 29	17. 45	8. 10	·0892					
19. 22	17. 10	9. 33	·0896					
21. 26	21. 35		***					
	***	10. 54	·0907					
23. 2	29. 20	12. 22	·0908					
23. 59	31. 10	15. 11	·0911					
		18. 3	·0918					
		22. 24	·0896					
		23. 24	·0902					
		23. 37	·0896					
		23. 59	·0893					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 15		June 15		June 15		June 15		
h m	° ′ ″	h m		h m		h m	°	
0. 0	21. 31. 10	0. 0	·0893	0. 0	·00958	1. 0	66·0	67·0
0. 48	32. 50	1. 13	·0885	4. 57	·00201	3. 0	68·0	69·0
	***	1. 45	·0895	8. 45	·01120	9. 0	71·0	72·0
4. 40	32. 50	2. 0	·0894	11. 43	·01183	21. 0	63·[illegible]	63·8
6. 26	27. 45	2. 16	·0907	13. 24	·01351			
6. 47	25. 50	2. 54	·0886	14. 15	·01320			
7. 28	26. 20	3. 6	·0886	19. 22	·02009			
8. 11	22. 45	3. 30	·0904	23. 5[illegible]	·0185[illegible]			
8. 40	24. 35	3. 41	·0893					
9. 37	21. 10	3. 47	·0902					
10. 15	23. 15	3. 57	·0897					
10. 32	20. 10	4. 22	·09[illegible]					
10. 56	23. 0	4. 37	·0895					
11. 43	19. 45	5. 2	·08[illegible]					
12. 3	20. 5	5. 16	·0892					
12. 29	22. 0	5. 42	·0894					
12. 57	17. 15	5. 46	·0889					
13. 5	19. 10	6. 40	·0917					
13. 13	16. 20	7. 13	·0909					
13. 32	24. 10	7. 41	·0912					
13. 47	27. 5	8. 0	·0898					
15. 13	8. 0	8. 41	·0905					
16. 11	17. 50	9. 15	·0891					
16. 37	12. 15	9. 42	·0900					
16. 52	16. 5	10. 21	·088[illegible]					
	***	10. 43	·0902					
17. 26	13. 10	11. 11	·0895					
17. 37	16. 35		***					
17. 40	14. 20	12. 5	·0899					
17. 45	17. 20	12. 24	·0906					
17. 54	14. 0	12. 52	·0892					
17. 57	17. 5	13. 3	·0896					
	***	13. 14	·0887					
18. 11	16. 10	13. 32	·0910					
18. 26	7. 20	14. 13	·0895					
18. 32	12. 15	14. 24	·0896					
18. 40	8. 25	14. 40	·0881					
18. 51	14. 50	14. 51	·0889					
	***	15. 22	·0884					
19. 20	16. 20	16. 11	·0897					
19. 26	11. 30	16. 30	·0895					
19. 35	19. 50	16. 46	·0902					
	***	17. 15	·0892					
20. 0	13. 10	17. 24	·0896					
	***		***					
20. 26	20. 45	18. 1	·0892					
20. 37	17. 20	18. 17	·0881					
20. 48	21. 10	18. 28	·0885					
	***	18. 39	·0881					
22. 27	26. 5	19. 18	·0888					
23. 36	32. 0		***					
23. 45	34. 10	19. 55	·0878					
23. 59	30. 5		***					
		21. 0	·0879					
			***					
		22. 45	·0891					
		22. 56	·0900					
		23. 16	·0895					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		June 15						
h m	′ ″	h m		h m		h m	°	°
		23. 23	·0906					
		23. 42	·0903					
		23. 47	·0907					
		23. 59	·0877					
June 16		June 16		June 16		June 16		
0. 0	21. 30. 5	0. 0	·0877	0. 0	·01850	1. 0	66·0	66·0
0. 17	31. 30	0. 11	·0867	1. 13	·01842	3. 0	68·0	68·0
0. 32	31. 30	0. 44	·0907	6. 1:	·01310	9. 0	68·0	69·0
0. 43	35. 0	0. 52	·0887	11. 25	·01141	21. 0	61·0	61·2
0. 54	32. 15	1. 15	·0927	18. 15	·01939			
1. 12	38. 10	1. 45	·0893	20. 6	·01725			
1. 26	34. 30	2. 11	·0909	23. 59	·01500			
1. 40	36. 5	2. 16	·0910					
1. 51	34. 45	2. 28	·0893					
2. 8	37. 0		***					
	***	2. 58	·0907					
3. 2	33. 10	3. 5	·0905					
3. 20	34. 20	3. 13	·0915					
3. 53	29. 45		***					
4. 12	30. 0	3. 32	·0913					
4. 25	27. 25	3. 42	·0902					
5. 18	28. 35		***					
	***	4. 13	·0905					
7. 12	22. 10	4. 26	·0897					
7. 45	24. 5		***					
8. 36	22. 10	5. 19	·0896					
9. 3	25. 15		***					
9. 25	23. 20	5. 44	·0904					
9. 47	23. 35	5. 56	·0900					
10. 13	18. 25	6. 30	·0913					
10. 32	28. 50	6. 53	·0909					
10. 51	26. 0		***					
11. 11	17. 10	8. 0	·0909					
11. 20	18. 10	8. 26	·0905					
11. 36	13. 15	8. 42	·0914					
12. 20	19. 5	9. 0	·0905					
12. 45	17. 20	9. 14	·0906					
	***	9. 24	·0910					
14. 13	21. 15	9. 40	·0903					
	***	9. 56	·0900					
15. 0	25. 55	10. 18	·0909					
15. 20	23. 10	10. 43	·0893					
	***	11. 4	·0897					
16. 7	24. 20	11. 14	·0912					
	***	11. 30	·0897					
17. 12	19. 30	11. 43	·0901					
	***	11. 51	·0897					
19. 27	18. 15	13. 13	·0895					
	***	13. 45	·0897					
20. 10	22. 5	14. 53	·0895					
20. 39	20. 50	16. 0	·0909					
20. 56	24. 5		***					
	***	19. 17	·0903					
22. 3	24. 20	19. 55	·0885					
	***	20. 44	·0887					
23. 59	27. 55	21. 42	·0882					
		22. 6	·0884					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		June16						
h m	° ′ ″	h m		h m		h m	°	°
		22. 26	·0893					
		22. 47	·0884					
		23. 14	·0890					
		23. 53	·0888					
		23. 59	·0892					
June17		June17		June17		June17		
0. 0	21. 27. 55	0. 0	·0892	0. 0	·01500	1. 0	63·5	64·0
	***	0. 15	·0891	1. 12	·01462	3. 0	65·5	66·[illegible]
3. 7	30. 0	0. 22	·0896	6. 6	·00761	9. 0	67·8	68·5
4. 28	29. 50		***	6. 30	·00827 ·00879	21. 0	61·0	61·7
5. 40	24. 45	2. 30	·0895					
5. 59	26. 40	3. 0	·0900	6. 52	·00820			
6. 15	23. 0	3. 37	·0905	8. 12	·00937			
6. 27	25. 40	3. 52	·0904	10. 13	·00920			
6. 40	22. 5	4. 19	·0921	13. 45	·01113			
6. 51	27. 10	4. 42	·0922	16. 15	·01344			
	***	5. 11	·0914	20. 0	·01838			
8. 35	22. 20	5. 21	·0923	22. 50	·01671 ·01610			
8. 45	19. 15	5. 31	·0920					
9. 33	20. 20		***	23. 59	·01562			
9. 56	26. 30	6. 12	·0921					
10. 47	16. 50	6. 42	·0938					
11. 50	23. 20	6. 57	·0910					
12. 28	19. 55	7. 36	·0909					
13. 12	22. 15	8. 7	·0916					
13. 44	19. 40	8. 26	·0913					
14. 15	21. 50	8. 44	·0919					
	***	8. 51	·0914					
14. 52	20. 15	9. 22	·0932					
15. 50	28. 30	10. 7	·0902					
16. 18	23. 45	11. 33	·0903					
16. 30	25. 0	11. 50	·0913					
17. 0	19. 55	12. 27	·0899					
	***	12. 45	·0913					
18. 26	15. 15	13. 16	·0918					
	***	13. 52	·0909					
19. 15	20. 40		***					
	***	14. 55	·0909					
19. 40	18. 5	15. 30	·0893					
	***	15. 54	·0902					
20. 57	21. 10	17. 26	·0907					
	***	18. 41	·0902					
22. 15	21. 15	19. 2	·0893					
23. 59	27. 30		***					
		20. 5	·0880					
			***					
		23. 59	·0890					
June18		June18		June18		June18		
0. 0	21. 27. 30	0. 0	·0890	0. 0	·01562	1. 0	64·5	65·0
1. 0	29. 15	0. 31	·0886	1. 45	·01462	3. 0	67·0	68·0
4. 15	26. 50	1. 2	·0891	6. 6	·00791	9. 0	72·0	72·0
4. 52	24. 25	2. 0	·0889	8. 39	·01190	22. 8	65·0	65·5
9. 57	22. 10	2. 27	·0898	11. 45	·01309			
10. 18	26. 20	3. 15	·0905	15. 10	·01442			
10. 45	22. 15	3. 55	·0897	20. 3	·01861			
	***	4. 50	·0905	23. 59	·02012			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June18		June18						
h m	° ′ ″	h m		h m		h m	°	°
14. 27	21. 25. 5	5. 13	[illegible]					
	***	5. 26	·0905					
18. 24	17. 15	5. 46	·0903					
20. 30	17. 35		***					
22. 26	21. [illegible]	8. 15	·0904					
23. 59	29. 5	8. 20	·0900					
			***					
		9. 51	·0898					
		10. 1	·0911					
		10. 16	[illegible]					
			***					
		11. 3	·0898					
		13. [illegible]	·0901					
		14. 21	·0897					
		15. 55	·0905					
		17. 13	·0899					
		17. 30	[illegible]					
		20. 57	·0897					
		21. 55	·0889					
		23. 59	[illegible]					
June19		June19		June19		June19		
0. 0	21. 29. 5	0. 0	·0896	0. 0	·02012	7. 30	67·8	68·3
0. 36	20. 30	1. 47	·0909	5. 40	·02140	21. 0	[illegible]	66·8
13. 10	22. 15	2. 11	·0915	11. 46	·02117			
15. 15	21. 25	3. 52	·0919	13. 57	·02176			
18. 17	17. 30		***	23. 59	·01643			
20. 0	18. 35	6. 14	·0910					
22. 5	25. 25	7. 29	·0918					
23. 29	31. 30	8. 51	·0912					
	(†)	10. 21	·0917					
		14. 0	·0912					
		16. 52	·0915					
		19. 52	·0905					
		21. 11	·0906					
		22. 31	·0895					
		23. 40	·0895					
			(†)					
June20		June20		June20		June20		
	(†)		(†)	0. 0	·01643	1. [illegible]	67·0	[illegible]
0. 40	21. 32. 45	0. 42	·0894	0. 26	[illegible] ·01572	3. 0	[illegible]	[illegible]
1. 54	30. 50	2. 59	·0914			[illegible]	[illegible]	[illegible]
3. 56	28. 10	3. 13	·0910	5. 18	·01471	21. 0	60·0	58·5
5. 10	25. 30	4. 42	·0913	7. 56	[illegible]			
10. 57	25. 20	5. 22	·0919	13. [illegible]	[illegible]			
	***	6. 51	·0917	15. [illegible]	·00869			
15. [illegible]	22. 25	8. 39	·0923	21. 7	·00536			
15. 56	18. 10	9. 52	·0912	22. 40	·00462			
	***	12. 12	[illegible]	23. 59	·00338			
19. 48	16. 30	14. 0	·0914					
19. 53	18. 25	14. 58	·0921					
20. 15	17. 55	17. 40	·0921					
20. 42	20. 30	18. 18	·0913					
21. 43	20. 40	19. 11	[illegible]					
23. 59	28. 35	20. 32	[illegible]					
		21. 27	[illegible]					
		23. [illegible]	[illegible]					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

June 20

Greenwich Mean Solar Time. h m	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
23. 33	·0903
23. 59	·0905

June 21

Greenwich Mean Solar Time. h m	Western Declination. ° ′ ″
0. 0	21. 28. 35
2. 23	31. 10
4. 40	26. 40
6. 6	25. 5
6. 37	23. 10
9. 42	24. 25
14. 55	21. 20
15. 37	22. 5
16. 48	20. 5 ***
19. 30	18. 50
21. 50	22. 10
23. 59	29. 30

Greenwich Mean Solar Time. h m	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
0. 0	·0905
0. 18	·0908
0. 28	·0905
0. 42	·0907
0. 55	·0905
1. 22	·0912
3. 0	·0921 ***
3. 35	·0914
3. 43	·0917
4. 5	·0912
4. 26	·0913
5. 12	·0926
5. 28	·0921
6. 13	·0920 ***
8. 18	·0931
9. 45	·0922 ***
13. 21	·0926
14. 28	·0933
14. 55	·0931
17. 40	·0934
18. 43	·0919
20. 15	·0910
22. 28	·0885
23. 59	·0879

Greenwich Mean Solar Time. h m	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
0. 0	·00338
1. 3	·00258
2. 46	·00040
	(†)
8. 15	—·00058
13. 32	·00120
20. 59:	·00483
23. 59	·00271

Greenwich Mean Solar Time. h m	Readings of Thermometers. Of H. F. Magnet. °	Of V. F. Magnet. °
1. 0	63·0	62·0
3. 0	64·5	64·0
9. 0	66·0	67·0
21. 0	65·0	65·5

June 22

Greenwich Mean Solar Time. h m	Western Declination. ° ′ ″
0. 0	21. 29. 30
1. 54	32. 35
8. 12	22. 25
9. 15	24. 35 ***
11. 23	24. 5
13. 45	21. 30 ***
16. 12	22. 35
19. 13	17. 30
20. 30	17. 20
22. 0	22. 20
23. 17	28. 25
23. 59	29. 10

Greenwich Mean Solar Time. h m	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
0. 0	·0879
0. 48	·0878
	(†)
2. 0	·0890
2. 29	·0897
3. 0	·0895
4. 30	·0908
5. 51	·0908
6. 0	·0900
6. 15	·0908 ***
7. 57	·0901 ***
10. 30	·0900
13. 13	·0907
13. 30	·0900
14. 40	·0917
16. 53	·0920
18. 15	·0910
20. 21	·0885
22. 50	·0885
23. 26	·0889
23. 59	·0889

Greenwich Mean Solar Time. h m	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
0. 0	·00271
0. 46	{ ·00178 ·02740
8. 54	·03261
12. 37	·03388
20. 20	·04063
23. 59	·03904

Greenwich Mean Solar Time. h m	Readings of Thermometers. Of H. F. Magnet. °	Of V. F. Magnet. °
1. 0	70·0	70·0
3. 0	72·3	72·3
9. 0	73·0	73·0
21. 0	66·0	66·0

June 23

Greenwich Mean Solar Time. h m	Western Declination. ° ′ ″
0. 0	21. 29. 10
2. 27	30. 5
6. 16	24. 45
9. 15	24. 0
16. 24	21. 35
19. 7	16. 5
20. 36	18. 0
22. 2	23. 25 ***
23. 10	26. 10
23. 59	29. 15

Greenwich Mean Solar Time. h m	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
0. 0	·0889
0. 28	·0887 ***
3. 29	·0909 ***
5. 12	·0907 ***
7. 39	·0917 ***
10. 40	·0912 ***
12. 5	·0922 ***
13. 12	·0920 ***
17. 50	·0932
18. 0	·0929
21. 58	·0907
23. 59	·0912

Greenwich Mean Solar Time. h m	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
0. 0	·03904
10. 10:	·03177
18. 17	·03910
23. 59	·03570

Greenwich Mean Solar Time. h m	Readings of Thermometers. Of H. F. Magnet. °	Of V. F. Magnet. °
1. 0	67·0	68·0
3. 0	68·0	68·0
9. 0	68·7	69·5
21. 0	62·0	62·0

June 24

Greenwich Mean Solar Time. h m	Western Declination. ° ′ ″
0. 0	21. 29. 15
1. 0	31. 10
2. 53	28. 50
3. 2	29. 35
3. 53	27. 30
4. 32	28. 25
5. 22	26. 20
5. 45	26. 30
5. 53	23. 35
6. 26	23. 0
11. 4	27. 10
11. 20	25. 5
12. 28	23. 15
12. 56	25. 5 ***
14. 0	23. 55
14. 16	26. 10
14. 43	25. 30
15. 4	22. 20 ***
15. 48	21. 50
16. 3	23. 5
16. 30	20. 45 ***
18. 50	17. 30
18. 57	19. 25
19. 15	6. 50
19. 42	24. 0
19. 53	24. 10
20. 2	18. 10
20. 10	21. 10
20. 22	17. 0
20. 47	23. 30
21. 18	26. 10
21. 37	30. 5
21. 48	20. 10

Greenwich Mean Solar Time. h m	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
0. 0	·0912
0. 7	·0915
0. 51	·0911
1. 17	·0913
1. 40	·0909
2. 15	·0919
2. 50	·0917
3. 0	·0911
3. 15	·0921
4. 6	·0920
4. 44	·0936
4. 59	·0931
5. 26	·0939
5. 32	·0937
5. 52	·0947
6. 11	·0923 ***
7. 0	·0919 ***
9. 11	·0930
9. 57	·0927
10. 11	·0935 ***
12. 14	·0934 ***
14. 45	·0957
15. 12	·0952
16. 0	·0955
16. 22	·0952
16. 42	·0957
18. 25	·0961 ***
19. 17	·0923
19. 44	·0941
20. 0	·0924
20. 11	·0927

Greenwich Mean Solar Time. h m	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
0. 0	·03570
1. 15	·03493
6. 36	·02792
7. 48	{ ·02851 ·02893
13. 36:	·03169
17. 56	·03829
20. 36	·03510
22. 45	·03564
23. 59	·03214

Greenwich Mean Solar Time. h m	Readings of Thermometers. Of H. F. Magnet. °	Of V. F. Magnet. °
1. 0	64·0	65·0
3. 0	67·0	67·0
9. 0	69·0	69·5
21. 0	64·5	62·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

VERTICAL FORCE.—June 22^{d}. 1^{h}. The adjustments were altered so that the scale-reading was increased by 17·71 div., or by 0·02594 parts of the whole Vertical Force.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June24		June24						
h m	° ′ ″	h m		h m		h m	°	°
22. 3	21. 29. 20	20. 40	·0911					
	***		***					
22. 54	31. 45	21. 40	·0924					
23. 17	30. 5	21. 50	·0916					
	***	22. 5	·0925					
23. 59	32. 30	22. 15	·0917					
			***					
		22. 44	·0920					
		22. 52	·0928					
		23. 15	·0910					
			(†)					
June25		June25		June25		June25		
0. 0	21. 32. 30		(†)	0. 0	·03214	1. 0	69·5	68·0
1. 11	32. 35	0. 11	·0909	2. 24	·02867	3. 0	72·0	72·0
1. 50	33. 40	0. 46	·0923	4. 8	·02446	9. 0	75·0	75·0
2. 9	31. 50	1. 0	·0916	8. 36	·03177	22. 10	71·0	71·8
2. 24	32. 30	1. 13	·0923	13. 38	·03390			
3. 37	31. 25	2. 0	·0891	22. 47	·04018			
3. 48	32. 35	2. 16	·0920	23. 59	·04017			
4. 6	29. 20	2. 32	·0917					
4. 28	28. 10	3. 0	·0944					
4. 45	28. 30	3. 16	·0919					
5. 0	26. 25	3. 36	·0915					
5. 33	26. 25	3. 42	·0921					
5. 50	28. 0	3. 58	·0896					
6. 13	25. 30	4. 11	·0903					
6. 56	23. 25	4. 30	·0901					
7. 8	25. 0	4. 46	·0912					
7. 40	23. 15		***					
7. 53	19. 45	5. 28	·0912					
8. 15	22. 29	5. 50	·0925					
	***	6. 5	·0911					
10. 33	26. 35	6. 13	·0916					
10. 48	24. 30	6. 26	·0914					
11. 10	27. 10	6. 43	·0931					
11. 22	25. 5	7. 0	·0925					
13. 57	25. 5	7. 21	·0932					
14. 20	27. 0	7. 41	·0926					
14. 51	23. 30	7. 54	·0933					
15. 18	27. 50		***					
15. 34	23. 15	8. 30	·0926					
16. 10	27. 40		***					
16. 27	22. 35	9. 41	·0924					
16. 50	23. 30	10. 21	·0931					
17. 36	17. 55	10. 33	·0926					
17. 43	19. 10	10. 51	·0930					
17. 52	18. 20	11. 21	·0925					
18. 20	20. 30		***					
18. 27	19. 25	13. 15	·0925					
18. 40	21. 0	16. 5	·0939					
18. 56	18. 10	16. 27	·0934					
19. 26	22. 45	16. 50	·0940					
19. 37	21. 30	17. 15	·0932					
	***	17. 31	·0934					
20. 15	26. 5	18. 0	·0924					
20. 40	23. 40	18. 12	·0931					
20. 48	24. 45	18. 25	·0927					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June25		June25						
h m	° ′ ″	h m		h m		h m	°	°
20. 57	21. 22. 30	18. 40	·0935					
21. 16	28. 35	19. 9	·0911					
21. 27	27. 30	19. 13	·0917					
21. 45	30. 35	19. 30	·0913					
21. 58	30. 0	19. 51	·0921					
23. 30	34. 20	20. 25	·0921					
	***	20. 40	·0926					
23. 59	35. 25	20. 51	·0914					
		21. 24	·0912					
		21. 36	·0915					
		21. 57	·0907					
		22. 36	·0911					
		23. 0	·0907					
			(†)					
June26		June26		June26		June26		
0. 0	21. 35. 25		(†)	0. 0	·04017	8. 50	76·5	77·5
0. 46	33. 20	0. 11	·0901	2. 30	·03900	21. 0	73·0	72·0
	***	0. 29	·0923	7. 36	·03377			
3. 30	31. 15	1. 1	·0904	8. 47	·03520			
3. 51	28. 5		***	12. 20	·03620			
4. 15	29. 10	2. 12	·0909	20. 54	·04289			
	***		***	22. 18	·04300			
5. 12	22. 5	2. 28	·0920	23. 59	·04179			
	***	2. 43	·0906					
			***					
8. 40	25. 10							
9. 17	20. 10	3. 27	·0930					
	***	3. 43	·0907					
10. 4	24. 15		***					
	***	4. 5	·0916					
12. 25	21. 40	4. 26	·0906					
13. 14	26. 50		***					
14. 13	22. 30	4. 46	·0913					
14. 56	26. 15	5. 13	·0942					
15. 47	24. 25	5. 32	·0930					
18. 42	24. 10		***					
19. 2	22. 0	6. 12	·0924					
19. 30	24. 50		***					
20. 7	21. 20	6. 30	·0932					
	***	6. 43	·0921					
20. 44	24. 5	7. 7	·0921					
21. 10	23. 30	7. 16	·0927					
22. 27	25. 45	7. 30	·0918					
23. 0	29. 10	7. 52	·0911					
23. 59	31. 15	8. 12	·0921					
		8. 33	·0916					
		8. 50	·0930					
		9. 12	·0917					
		9. 45	·0910					
		10. 5	·0915					
		10. 27	·0911					
		10. 43	·0917					
		10. 51	·0915					
		11. 12	·0921					
		11. 40	·0909					
		11. 51	·0913					
		12. 12	·0910					
		12. 43	·0911					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		June26						
h m	° ′ ″	h m		h m		h m	°	°
		13. 6	·0921					
		14. 0	·0910					
		15. 43	·0913					
		16. 15	·0904					
		16. 54	·0901					
		17. 45	·0911					
		18. 33	·0909					
		19. 0	·0895					
		19. 25	·0897					
		19. 55	·0884					
		20. 21	·0882					
		20. 35	·0887					
		20. 45	·0885					
		21. 25	·0895					
			***					
		23. 59	·0893					
June27		June27		June27		June27		
0. 0	21. 31. 15	0. 0	·0893	0. 0	·04179	1. 0	76·0	76·0
2. 46	30. 5	0. 52	·0892	5. 30	·03490	3. 0	77·0	77·0
5. 55	22. 10	1. 13	·0899	7. 50	·03738	9. 0	78·0	79·0
9. 3	23. 10	1. 45	·0894	11. 20	·03820	21. 0	70·0	71·5
11. 8	26. 55	2. 12	·0901	12. 57	·03942			
12. 50	25. 0	2. 30	·0898	15. 6	·04221			
13. 35	28. 30	3. 11	·0897		(†)			
	***	3. 22	·0904	21. 10	·04223			
18. 20	7. 35	3. 57	·0896	22. 50	{ ·04048 ·03942			
	***	4. 28	·0907					
19. 27	16. 50	4. 33	·0903	23. 59	·03936			
23. 40	34. 5	5. 0	·0898					
23. 59	34. 10	5. 28	·0902					
		6. 51	·0905					
		7. 45	·0910					
		8. 27	·0902					
		10. 17	·0905					
		13. 25	·0915					
		14. 54	·0913					
		16. 28	·0919					
		19. 38	·0909					
		20. 28	·0902					
		23. 17	·0916					
		23. 59	·0915					
June28		June28		June28		June28		
0. 0	21. 34. 10	0. 0	·0915	0. 0	·03936	1. 0	71·0	72·0
1. 47	34. 30	0. 19	·0919	7. 32	·03703	3. 0	72·0	73·0
5. 45	25. 45	4. 27	·0925	10. 12	{ ·03820 ·03783	9. 0	73·0	73·0
13. 26	28. 35	4. 35	·0916			21. 0	63·0	65·0
17. 0	23. 20	4. 45	·0924	23. 16	·02644			
19. 39:	17. 30	5. 0	·0930	23. 59	·02610			
23. 59	33. 15	5. 56	·0922					
			***					
		7. 15	·0929					
			***					
		11. 44	·0927					
			***					
		16. 15	·0935					
			***					
		19. 50	·0916					
		23. 59	·0903					
June29		June29		June29		June29		
0. 0	21. 33. 15	0. 0	·0903	0. 0	·02610	1. 0	66·0	66·5
1. 55	34. 0	3. 18	·0904	1. 12	·02567	3. 0	68·0	69·0
3. 17	31. 10	4. 0	·0913	6. 15	·01863	9. 0	69·0	70·0
5. 12	23. 50		***	10. 12	·02020	21. 0	65·0	65·0
6. 25	22. 30	10. 14	·0926	13. 52	·02284			
10. 48	25. 25	13. 52	·0925	18. 21	·02829			
16. 7	24. 5	17. 28	·0930	21. 0	{ ·02590 ·02539			
18. 58	16. 55	18. 40	·0927					
20. 13	17. 40	20. 52	·0900	23. 59	·02321			
21. 36	22. 30	22. 26	·0897					
23. 30	32. 15	23. 0	·0899					
23. 59	32. 40	23. 59	·0907					
June30		June30		June30		June30		
0. 0	21. 32. 40	0. 0	·0907	0. 0	·02321	1. 0	69·8	70·0
3. 13	30. 10	0. 34	·0905	1. 26	·02192	3. 0	72·0	72·0
7. 4	21. 30	2. 0	·0917	3. 56	·01725	9. 0	73·0	74·0
9. 20	23. 10	4. 45	·0923	6. 7	·02044	21. 0	64·0	65·0
10. 37	23. 45	5. 6	·0926	7. 45	·02203			
15. 48	23. 35	6. 0	·0921	11. 50	·02390			
19. 15	16. 55	8. 23	·0932	17. 50	·03224			
20. 56	19. 20	8. 56	·0928	22. 18	·02736			
22. 8	23. 40	9. 42	·0931	23. 59	·02672			
23. 20	30. 35	10. 1	·0927					
23. 59	33. 10	13. 50	·0942					
		14. 45	·0941					
		17. 30	·0943					
		20. 30	·0925					
		22. 30	·0921					
		23. 26	·0924					
		23. 59	·0922					
July 1		July 1		July 1		July 1		
0. 0	21. 33. 10	0. 0	·0922	0. 0	·02672	1. 0	66·0	67·0
0. 57	33. 50	2. 40	·0934	2. 15	·02659	3. 0	68·0	68·0
3. 30	32. 25	3. 4	·0940	10. 26:	·01957	9. 0	72·0	73·0
5. 47	26. 20	5. 13	·0933	20. 53	·02700	21. 0	66·0	67·0
8. 40	23. 30	5. 28	·0938	21. 40	·02618			
11. 36	24. 35	6. 15	·0939	22. 20	·02631			
11. 50	23. 30	6. 26	·0935	23. 59	·02563			
12. 37	25. 25	6. 46	·0939					
14. 4	21. 55	6. 55	·0935					
14. 47	22. 20	7. 11	·0942					
14. 56	23. 10	7. 37	·0943					
15. 8	21. 20	7. 47	·0949					
15. 47	20. 25	8. 30	·0942					
16. 36	21. 10	9. 44	·0944					
18. 27	18. 15	10. 21	·0937					
19. 58	19. 0	11. 39	·0943					
23. 0	26. 30	11. 45	·0938					
23. 59	29. 35		***					
		13. 59	·0934					
		16. 50	·0939					
		17. 18	·0936					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		July 1						
h m	° ′ ″	h m		h m		h m	°	°
		18. 22	·0936					
		19. 11	·0931					
		22. 40	·0919					
		22. 49	·0921					
		23. 40	·0921					
		23. 59	·0919					
July 2		July 2		July 2		July 2		
0. 0	21. 29. 35	0. 0	·0919	0. 0	·02563	1. 0	67·0	68·0
1. 51	33. 25	0. 52	·0924	2. 15	·02509	3. 0	70·0	71·0
5. 48	24. 40	2. 0	·0938	9. 40	·01842	9. 0	72·8	73·5
11. 38	25. 15	2. 43	·0934	21. 7	·02536	22. 40	69·0	70·0
16. 39	20. 30	3. 13	·0937	23. 59	·02413			
19. 37	14. 20	4. 13	·0930					
20. 58	16. 5	5. 12	·0925					
22. 40	23. 0	11. 11	·0922					
23. 59	29. 35	13. 3	·0926					
		17. 43	·0934					
		19. 14	·0928					
		21. 15	·0902					
		23. 0	·0891					
		23. 59	·0899					
July 3		July 3		July 3		July 3		
0. 0	21. 29. 35	0. 0	·0899	0. 0	·02413	9. 0	78·0	79·0
1. 43	33. 50	0. 21	·0896	3. 26	·02169	21. 0	70·5	71·7
7. 7	22. 55	0. 57	·0908	7. 46	·01541			
11. 42	23. 30	1. 29	·0897	9. 35	·01680			
12. 48	22. 0	2. 26	·0907	13. 22	·01813			
13. 43	23. 25	2. 53	·0905	23. 3	·02614			
14. 36	22. 50	3. 51	·0913	23. 59	·02532			
15. 43	25. 35	5. 17	·0908					
18. 6	22. 0	5. 30	·0919					
18. 47	17. 40	6. 14	·0912					
20. 13	16. 5	7. 55	·0919					
21. 20	18. 10	8. 15	·0923					
23. 25	27. 30	8. 58	·0913					
23. 59	28. 40	9. 54	·0917					
		10. 21	·0921					
		10. 54	·0917					
		11. 20	·0919					
		14. 12	·0913					
		14. 43	·0915					
		15. 5	·0911					
		18. 44	·0919					
		20. 54	·0911					
		21. 24	·0912					
		21. 45	·0907					
		22. 13	·0909					
		22. 25	·0903					
		22. 45	·0904					
		22. 58	·0897					
		23. 36	·0905					
		23. 59	·0902					
July 4		July 4		July 4		July 4		
0. 0	21. 28. 40		(†)	0. 0	·02532	1. 0	71·4	72·7
0. 47	31. 35	0. 47	·0895	2. 20	·02502	3. 0	73·0	74·2

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 4		July 4		July 4		July 4		
h m	° ′ ″	h m		h m		h m	°	°
1. 0	21. 28. 45	1. 21	·0889	10. 4[illegible]	[illegible]	9. 10	76·8	[illegible]
2. 3	28. 25	1. 45	·0900	17. 56	·02603	21. 0	[illegible]	[illegible]
2. 20	29. 50	1. 53	·0897	21. 10	[illegible] [illegible]			
4. 37	27. 50	2. 13	·0912	23. 59	[illegible]			
6. 6	24. 0	2. 29	·0894					
7. 47	21. 40	2. 41	·0895					
10. 20	22. 30	2. 46	·0887					
10. 36	20. 55	3. 8	·0895					
10. 47	21. 25	3. 45	·0891					
11. 28	18. 40	4. 25	·0897					
12. 2	23. 35	4. 49	·0895					
12. 50	18. 30	5. 10	·0898					
14. 30	29. 40	5. 52	·0896					
15. 21	20. 5	6. 15	·0901					
15. 42	20. 50	7. 0	·0897					
15. 56	18. 55	7. 15	·0905					
16. 13	20. 25	7. 46	·0905					
16. 40	18. 30	8. 9	·0902					
17. 39	29. 10	9. 10	·0907					
17. 50	17. 25	9. 50	·0902					
18. 36	18. 20	10. 6	·0911					
20. 0	17. 5	10. 21	·0901					
22. 16	23. 10	10. 40	·0910					
22. 33	22. 50	11. 15	·0897					
23. 23	24. 30	11. 23	·0899					
23. 59	24. 0	12. 13	·0898					
		12. 26	·0902					
		12. 47	·0894					
		13. 28	·0895					
		13. 59	·0903					
		14. 26	·0898					
		15. 7	·0909					
		15. 32	·0901					
		18. 30	·0906					
		19. 10	·0895					
		20. 0	·0895					
		23. 3	·0876					
		23. 17	·0876					
			(†)					
July 5		July 5		July 5		July 5		
0. 0	21. 24. 0		(†)	0. 0	·01993	1. 0	71·0	71·5
0. 28	23. 50	1. 0	·0889	1. 36	·01847	3. 0	73·4	74·[illegible]
1. 40	27. 0	1. 41	·0884	4. 7	·01387	9. 0	75·0	[illegible]
4. 52	25. 0	2. 9	·0877	6. 45	·01820	21. 0	69·8	70·0
6. 14	22. 15	2. 50	·0879	13. 28	·02182			
10. 53	21. 45	4. 13	·0896	17. 3	·02642			
11. 48	25. 30	5. 10	·0894	19. 3	·03009			
12. 29	24. 5	5. 16	·0896	23. 59	·02629			
12. 53	33. 10	7. 26	·0898					
13. 36	21. 35	7. 45	·0901					
14. 10	18. 55	9. 40	·0900					
14. 27	21. 20	10. 45	·0903					
14. 36	19. 15	10. 51	·0915					
14. 42	21. 20	11. 7	·0904					
14. 47	19. 25	11. 54	·0914					
15. 0	22. 0	12. 15	·0919					
15. 25	21. 30	12. 31	·0911					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 5		July 5						
h m	° ′ ″	h m		h m		h m	°	°
16. 4	21. 30. 0	12. 55	·0919					
	***	13. 13	·0914					
16. 40	23. 25		***					
	***	13. 55	·0911					
18. 6	15. 35	14. 11	·0915					
	***	14. 22	·0910					
20. 7	15. 20	14. 47	·0917					
20. 13	12. 30	16. 15	·0913					
20. 37	12. 45	17. 20	·0917					
20. 46	16. 5	17. 40	·0915					
	***	17. 56	·0915					
23. 59	25. 40	19. 55	·0897					
		20. 40	·0886					
		21. 54	·0888					
		22. 43	·0877					
		23. 45	·0891					
		23. 59	·0887					
July 6		July 6		July 6		July 6		
0. 0	21. 25. 40	0. 0	·0887	0. 0	·02629	1. 0	74·2	74·7
0. 28	25. 5	1. 29	·0885	5. 4	·01813	3. 0	77·0	77·2
2. 26	26. 45	2. 39	·0900	7. 45	·02120	9. 0	78·0	78·5
6. 30	22. 35	3. 48	·0906	12. 26:	·02357	21. 4	72·5	71·0
10. 8	22. 30	4. 10	·0903	18. 53	·03259			
12. 50	24. 25	4. 52	·0908	21. 45	·03022			
13. 7	26. 30	5. 12	·0904	23. 59	·02823			
14. 9	22. 35	5. 16	·0907					
18. 29	15. 45	5. 29	·0905					
	***	5. 40	·0909					
19. 41	18. 20	6. 13	·0907					
21. 25	18. 40	6. 37	·0909					
21. 27	22. 0	6. 51	·0913					
21. 30	15. 10	7. 15	·0910					
21. 34	22. 10	8. 40	·0914					
21. 45	16. 5	8. 55	·0908					
21. 48	21. 50	12. 43	·0913					
21. 52	16. 15	13. 22	·0920					
21. 56	20. 5	13. 54	·0915					
23. 59	26. 55	14. 45	·0913					
		18. 6	·0922					
		18. 28	·0917					
		21. 54	·0903					
		22. 12	·0894					
			(†)					
July 7		July 7		July 7		July 7		
0. 0	21. 26. 55	0. 0	·0890	0. 0	·02823	1. 0	76·2	75·5
1. 52	30. 25	0. 27	·0892	4. 24	·01978	3. 0	78·0	78·0
6. 36	20. 40	0. 53	·0883	5. 33	·02200	9. 5	80·0	80·3
7. 5	16. 35	1. 44	·0892	8. 28	·02371	21. 8	72·4	72·0
7. 40	20. 25	1. 52	·0903	12. 59:	·02548			
9. 3	23. 15	2. 0	·0898	19. 45	·03438			
11. 50	22. 40	2. 26	·0896	23. 59	·03097			
12. 15	21. 20	2. 30	·0902					
12. 33	22. 30	2. 44	·0899					
17. 29	19. 0	3. 20	·0917					
17. 45	17. 20	3. 44	·0892					
18. 17	18. 25	3. 52	·0898					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 7		July 7						
h m	° ′ ″	h m		h m		h m	°	°
18. 33	21. 17. 20	4. 15	·0910					
19. 45	18. 0	4. 30	·0913					
20. 0	19. 10	5. 28	·0909					
20. 40	17. 50	6. 17	·0914					
22. 0	23. 5	6. 29	·0911					
	***	6. 41	·0919					
23. 59	25. 0	6. 52	·0907					
		7. 3	·0915					
		7. 11	·0913					
		7. 21	·0915					
		7. 41	·0906					
		8. 7	·0909					
		8. 31	·0904					
		8. 43	·0909					
		10. 19	·0909					
		10. 30	·0904					
		11. 12	·0910					
		12. 28	·0907					
		13. 18	·0909					
			***					
		16. 43	·0927					
		18. 28	·0922					
		19. 7	·0911					
		19. 30	·0909					
		19. 54	·0911					
		20. 28	·0905					
		20. 44	·0907					
		22. 11	·0896					
		22. 17	·0899					
		22. 48	·0884					
		23. 59	·0899					
July 8		July 8		July 8		July 8		
0. 0	21. 25. 0	0. 0	·0899	0. 0	·03097	1. 0	75·0	75·4
1. 45	26. 35	0. 28	·0900	9. 26:	·03167	3. 0	76·4	77·0
3. 16	26. 50	1. 21	·0906	18. 42	·03150	9. 0	78·0	78·9
5. 32	23. 0	2. 54	·0907	23. 59	·02600	21. 0	71·0	71·0
6. 40	23. 30	3. 11	·0911					
8. 40	22. 5	3. 42	·0909					
12. 52	23. 20	4. 43	·0920					
13. 9	24. 30	5. 49	·0919					
13. 36	22. 30	6. 49	·0927					
13. 55	22. 30		***					
14. 20	26. 0	12. 45	·0921					
14. 47	23. 30	13. 22	·0927					
	***	14. 13	·0923					
19. 6	18. 20	14. 37	·0926					
19. 27	19. 0	20. 16	·0927					
19. 36	14. 50	21. 12	·0913					
19. 45	16. 25	23. 11	·0908					
	***	23. 52	·0908					
22. 6	21. 20	23. 59	·0911					
23. 59	27. 50							
July 9		July 9		July 9		July 9		
0. 0	21. 27. 50	0. 0	·0911	0. 0	·02600	1. 0	74·8	75·0
1. 4	31. 0	1. 13	·0904	2. 55	·02221	3. 0	77·0	77·3
3. 30	28. 50	2. 18	·0916	6. 22	·01730	9. 0	78·0	78·1

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 9		July 9		July 9		July 9		
h m	° ′ ″	h m		h m		h m	°	°
5. 45	21. 24. 30	3. 0	·0906	11. 25	·01076	22. 48	73·2	72·8
9. 12	23. 0	3. 13	·0910	14. 30	·02360			
13. 45	23. 25	3. 48	·0905	17. 50	·02863			
14. 22	22. 30	4. 12	·0909	20. 19	·02560 ·02500			
14. 47	22. 55	4. 30	·0907					
16. 45	20. 30	5. 13	·0911	21. 7	·02518			
18. 52	16. 0	7. 12	·0927	23. 59	·02362			
19. 10	17. 0	7. 45	·0923					
19. 40	16. 10	11. 5	·0919					
21. 30	18. 5	11. 22	·0925					
23. 59	26. 35	11. 33	·0921					
		15. 28	·0920					
		18. 26	·0923					
		18. 44	·0919					
		20. 51	·0909					
			(†)					
		22. 48	·0898*					
July 10		July 10		July 10		July 10		
0. 0	21. 26. 35	0. 0	·0892	0. 0	·02362	9. 6	78·7	79·3
1. 57	29. 30	1. 40	·0896	5. 37	·01513	21. 0	71·0	71·8
3. 9	27. 15	2. 17	·0906	7. 50	·01717			
3. 30	28. 0	2. 41	·0901	12. 20:	·01963			
4. 15	26. 5	2. 58	·0900	17. 42	·02739			
4. 40	27. 10	3. 18	·0906	21. 2	·02371			
7. 40	23. 0	4. 15	·0897	23. 59	·02198			
7. 56	24. 10	4. 37	·0905					
8. 15	23. 5	5. 4	·0904					
8. 32	26. 5	5. 37	·0911					
9. 32	19. 40	6. 30	·0904					
10. 25	23. 50	7. 15	·0912					
12. 24	22. 35	8. 20	·0909					
13. 15	27. 10	8. 27	·0933					
13. 40	19. 5	8. 30	·0925					
14. 15	21. 10	8. 36	·0931					
15. 27	21. 30	8. 43	·0915					
15. 50	20. 50	8. 48	·0913					
16. 6	18. 0	9. 7	·0927					
	***	9. 22	·0914					
17. 15	23. 15	9. 47	·0907					
17. 34	28. 10	10. 18	·0920					
17. 51	23. 10	10. 29	·0917					
18. 35	33. 35	10. 58	·0923					
19. 15	33. 30	11. 5	·0919					
	***	11. 20	·0920					
20. 8	22. 10	11. 30	·0913					
20. 24	29. 15	11. 38	·0919					
20. 40	28. 50	11. 45	·0913					
20. 43	32. 0	11. 54	·0919					
20. 50	12. 10	12. 0	·0913					
21. 15	31. 5	12. 20	·0916					
21. 27	27. 15	12. 40	·0915					
21. 32	32. 45	12. 52	·0917					
21. 37	29. 10	13. 9	·0921					
21. 46	31. 50	13. 15	·0932					
21. 51	24. 15	13. 42	·0911					
21. 55	30. 50		***					
22. 14	26. 5	14. 40	·0914					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 10		July 10						
h m	° ′ ″	h m		h m		h m	°	°
22. 22	21. 29. 0	14. 45	·0921					
22. 30	27. 10	14. 58	·0918					
	***	15. 52	·0921					
23. 59	30. 45	16. 30	·0903					
		17. 8	·0902					
		17. 29	·0896					
		17. 45	·0901					
		17. 58	·0884					
		18. 5	·0873					
		18. 57	·0883					
		19. 14	·0895					
		19. 55	·0879					
		20. 26	·0878					
		20. 44	·0855					
		20. 55	·0879					
		21. 2	·0876					
		21. 20	·0892					
		21. 45	·0888					
		21. 52	·0893					
		22. 0	·0885					
		22. 5	·0887					
		22. 15	·0887					
		22. 25	·0895					
		22. 31	·0882					
		22. 45	·0886					
		22. 54	·0883					
		23. 2	·0887					
		23. 17	·0886					
		23. 43	·0889					
		23. 59	·0879					
July 11		July 11		July 11		July 11		
0. 0	21. 30. 45	0. 0	·0879	0. 0	·02198	1. 0	76·4	77·0
	***	0. 14	·0882	3. 27	·02142	3. 0	78·4	80·0
1. 6	33. 0	0. 36	·0875		***	9. 0	81·2	81·2
1. 45	31. 5	0. 52	·0879	4. 50	·01793	21. 0	75·0	73·5
1. 56	33. 10	1. 11	·0873	5. 13	·01665			
2. 7	30. 10	1. 51	·0888	5. 35	·01671			
2. 21	33. 30	2. 0	·0863	5. 47	·01742			
3. 8	31. 25	2. 29	·0925	5. 56	·01683			
3. 26	27. 30	2. 56	·0933	6. 3	·01760			
3. 47	33. 50	3. 15	·0909	6. 7	·01677			
4. 6	27. 5	3. 43	·0947	6. 15	·01720			
4. 11	29. 0	3. 45	·0946	7. 20	·01743			
4. 16	26. 10	3. 49	·0956	7. 37	·01678			
4. 25	31. 20	4. 7	·0937	8. 15	·01809			
4. 33	27. 15	4. 30	·0915		***			
4. 41	31. 30	4. 51	·0939	10. 50	·01810			
4. 47	28. 10	5. 0	·0928		***			
4. 53	30. 25	5. 14	·0947	12. 17	·01982			
5. 0	28. 15	5. 22	·0930	13. 8	·02020			
5. 13	27. 40	5. 30	·0939	13. 30	·01989			
5. 32	23. 20	5. 33	·0935	18. 36	·02782			
5. 40	28. 5	5. 37	·0941	23. 59	·02250			
5. 51	19. 10	5. 46	·0922					
6. 0	25. 50	5. 55	·0943					
6. 6	15. 5	6. 1	·0921					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 11		July 11						
h m	° ′ ″	h m		h m		h m	°	°
6.30	21.26.0	6.14	·0946					
6.52	18.10	6.16	·0938					
7.6	22.10	6.28	·0941					
7.17	18.5	7.4	·0888					
7.37	24.20	7.16	·0881					
7.46	18.35	7.30	·0895					
7.56	21.10	7.44	·0860					
	***	7.47	·0864					
8.40	22.10	8.0	·0861					
9.20	29.15		***					
10.0	20.45	9.12	·0887					
10.5	23.10		***					
10.20	18.15	10.10	·0855					
10.50	29.5	10.30	·0874					
10.54	20.0	10.47	·0869					
11.0	23.0	11.0	·0882					
11.26	5.10	11.14	·0857					
11.45	9.5	11.31	·0889					
12.20	21.10	11.42	·0885					
12.57	16.35	11.50	·0894					
13.22	22.10	11.58	·0885					
13.30	20.30	12.10	·0897					
13.40	22.5	12.17	·0883					
14.6	8.30	12.40	·0885					
14.30	12.0	13.14	·0867					
14.42	10.5	13.42	·0896					
15.15	12.45	13.53	·0888					
15.38	10.10	14.10	·0907					
15.52	12.20	14.30	·0892					
16.15	8.30		***					
16.38	12.35	15.42	·0891					
16.45	10.0	16.7	·0898					
16.57	14.5	16.40	·0883					
	***	17.4	·0894					
17.50	8.10	17.30	·0890					
18.6	13.5		***					
18.15	11.15	18.7	·0891					
18.24	13.55	18.12	·0898					
18.38	12.20	18.34	·0884					
18.54	15.40	19.7	·0879					
19.7	13.10	19.11	·0890					
19.17	18.50		***					
19.33	15.25	19.45	·0857					
19.40	20.50	20.0	·0892					
19.45	22.0	21.0	·0877					
20.0	19.40		***					
20.9	15.0	21.45	·0894					
20.15	21.0	22.10	·0872					
20.36	22.50	22.45	·0888					
20.45	20.10	22.57	·0879					
21.4	24.0	23.30	·0897					
21.15	22.15	23.47	·0891					
21.23	25.0		(†)					
21.28	11.10							
21.45	26.45							
21.54	22.20							
22.0	31.25							
22.13	26.30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 11								
h m	° ′ ″	h m		h m		h m	°	°
22.47	21.24.35							
	***							
23.57	31.30							
July 12		J 12		July 12		July 12		
0.0	21.31.30		(†)	0.0	·02250	1.0	80·0	79·5
0.26	35.20	0.14	·0891	3.36	·01432	3.0	83·0	83·0
0.45	33.25	0.30	·0909	8.30	·02211	9.0	85·0	84·0
1.30	33.20	1.12	·0887	12.15:	·02468	21.0	75·2	74·6
2.30	27.40	1.52	·0911	16.20	·03203			
4.11	20.35	2.21	·0889	20.9:	·02432			
4.40	24.10	2.43	·0896	23.59	·02041			
6.30	23.30	3.13	·0893					
7.0	22.5	3.42	·0897					
7.12	23.10	4.57	·0850					
7.30	21.0	5.52	·0857					
7.47	15.30	5.56	·0848					
8.16	17.10	6.6	·0857					
8.54	23.0	6.10	·0848					
9.30	22.35	6.14	·0859					
9.57	24.25	6.20	·0854					
10.26	23.45	6.27	·0862					
10.45	25.30	6.30	·0850					
11.17	28.0	6.42	·0849					
11.30	26.30	6.45	·0857					
12.25	27.30	6.51	·0850					
13.22	23.30	6.59	·0865					
15.40	22.25	7.6	·0857					
16.28	20.10	7.12	·0871					
17.10	20.25	7.15	·0866					
18.55	17.15	7.21	·0870					
19.7	15.35	7.41	·0844					
19.15	16.35	7.57	·0854					
19.19	15.40	8.51	·0857					
19.42	17.10	9.15	·0855					
19.51	16.30	10.25	·0863					
20.4	18.35	15.0	·0879					
20.20	18.20	16.20	·0886					
20.40	21.5	17.57	·0888					
21.20	20.30	19.14	·0870					
23.59	28.35	20.54	·0857					
		21.10	·0844					
		21.50	·0840					
		23.0	·0847					
		23.59	·0849					
July 13		July 13		July 13		July 13		
0.0	21.28.35	0.0	·0849	0.0	·02041	1.0	80·0	80·2
1.15	30.40	0.27	·0843	3.47	·01272	3.0	83·0	83·4
	***	2.4	·0855	6.25:	·01793	9.0	82·8	83·5
2.25	25.50	2.58	·0849	9.9	·01920	21.0	71·0	70·4
4.7	27.30	5.11	·0839	12.15	·02359			
4.47	24.25	6.51	·0861	15.0	·02920			
7.50	22.30	7.37	·0861	18.47	·02163			
8.15	18.20	7.52	·0869	21.3	·01934			
9.26	24.15	8.5	·0866	23.59	·01738			
10.0	22.20	8.16	·0881					
11.15	24.40	8.56	·0865					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 13		July 13						
h m	° ′ ″	h m		h m		h m	°	°
12. 7	21. 21. 30	9. 45	·0866					
15. 54	23. 25	10. 34	·0861					
16. 45	21. 15	10. 50	·0865					
17. 4	22. 35	11. 6	·0860					
18. 18	17. 30	11. 52	·0862					
21. 28	20. 5	12. 12	·0859					
23. 59	31. 25	13. 16	·0872					
		14. 28	·0873					
		15. 45	·0883					
		17. 54	·0883					
		20. 28	·0864					
		22. 21	·0862					
		23. 16	·0867					
		23. 59	·0869					
July 14		July 14		July 14		July 14		
0. 0	21. 31. 25	0. 0	·0869	0. 0	·01738	1. 0	74·3	74·1
1. 33	31. 40	0. 11	·0869	8. 47:	·00959	3. 0	76·2	76·4
5. 55	22. 20	0. 30	·0876	16. 30	·01872	9. 0	77·2	77·6
6. 42	21. 35	0. 51	·0876	23. 59	·01388	21. 0	69·3	69·0
10. 9	24. 25	1. 17	·0882					
12. 30	23. 10	1. 56	·0883					
13. 4	24. 40	3. 11	·0892					
16. 15	22. 50	3. 22	·0887					
17. 47	18. 35	3. 29	·0891					
18. 15	20. 10	3. 42	·0886					
19. 18	17. 45	3. 54	·0894					
	***	4. 12	·0889					
20. 57	18. 30	5. 6	·0889					
23. 59	30. 15	5. 26	·0895					
		5. 31	·0894					
		6. 19	·0897					
		6. 40	·0893					
		9. 24	·0892					
		9. 34	·0898					
		9. 49	·0895					
		10. 0	·0897					
		10. 31	·0892					
		11. 7	·0898					
		12. 10	·0893					
		12. 59	·0905					
		13. 30	·0903					
		16. 24	·0911					
		18. 38	·0907					
		21. 35	·0884					
		23. 12	·0885					
		23. 51	·0873					
		23. 59	·0878					
July 15		July 15		July 15		July 15		
0. 0	21. 30. 15	0. 0	·0878	0. 0	·01388	1. 0	74·0	74·0
1. 57	31. 10	0. 17	·0874	4. 18	·00512	3. 0	76·4	76·8
3. 45	27. 20		***	8. 33:	·00960	9. 0	78·0	78·8
4. 0	27. 35	2. 43	·0877	12. 3	·01080	21. 0	73·2	73·0
4. 36	26. 5	3. 11	·0881	16. 8	·01459			
5. 3	26. 10	3. 41	·0873	20. 5	·01928			
5. 40	22. 5	3. 56	·0877	23. 59	·01664			
5. 54	22. 40	4. 30	·0874					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 15		July 15						
h m	° ′ ″	h m		h m		h m	°	°
6. 45	21. 22. 20	5. 6	·0880					
11. 7	23. 45	5. 30	·0875					
11. 40	25. 30	6. 5	·0879					
12. 3	24. 0	6. 51	·0874					
12. 45	23. 20		***					
13. 9	25. 20	10. 15	·0876					
13. 37	23. 45	10. 43	·0881					
14. 4	25. 30	11. 0	·0879					
14. 53	22. 35	11. 24	·0884					
16. 0	24. 25	12. 44	·0883					
17. 59	18. 0	13. 13	·0887					
18. 56	17. 15	13. 44	·0884					
21. 5	21. 50	15. 15	·0885					
22. 25	28. 20	16. 30	·0892					
22. 52	29. 10	19. 22	·0882					
23. 59	35. 30	20. 28	·0861					
		22. 36	·0854					
		22. 59	·0860					
		23. 36	·0862					
		23. 54	·0875					
July 16		July 16		July 16		July 16		
0. 0	21. 35. 30		(†)	0. 0	·01664	1. 0	76·0	76·6
1. 32	36. 20	0. 10	·0864	6. 56	·00773	3. 0	78·0	78·8
4. 17	26. 5	1. 42	·0880	11. 0	·01078	9. 0	82·0	83·5
6. 2	23. 15	1. 55	·0875	15. 51	·01881	22. 4	75·0	75·5
11. 33	24. 35	3. 43	·0885	18. 57	·01403			
14. 13	23. 20		***	21. 48	·01222			
14. 40	24. 35	7. 30	·0874	23. 59	·01032			
14. 53	29. 0	8. 20	·0874					
15. 17	23. 50	9. 43	·0886					
16. 3	24. 25	12. 15	·0889					
	***	12. 40	·0895					
17. 4	16. 30	12. 55	·0891					
	***	14. 14	·0893					
17. 54	15. 0	15. 37	·0903					
18. 53	18. 20	16. 10	·0918					
19. 47	15. 5	18. 14	·0899					
20. 40	17. 30	18. 51	·0896					
22. 45	26. 45	19. 0	·0897					
23. 59	33. 25	21. 43	·0869					
			(†)					
July 17		July 17		July 17		July 17		
0. 0	21. 33. 25	0. 0	·0847	0. 0	·01032	8. 20	81·0	83·0
0. 27	34. 30	0. 14	·0846	1. 20	·00903	21. 0	73·0	72·0
2. 7	33. 10	0. 29	·0850	4. 50	·00320			
5. 30	23. 30	0. 44	·0845	7. 6	·00577			
7. 13	24. 5		***	9. 47:	·00738			
	***	3. 0	·0867	14. 46	·01691			
9. 27	28. 20	3. 24	·0876	17. 57	·01243 ·01100			
9. 58	25. 15	3. 43	·0870					
11. 30	25. 10	4. 5	·0884	21. 9	·01103			
12. 45	23. 30	4. 44	·0878	23. 59	·00777			
13. 24	25. 5	5. 12	·0880					
14. 37	22. 45	5. 30	·0875					
15. 40	22. 35	6. 14	·0874					
16. 17	21. 30	7. 33	·0881					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 17		July 17						
h m	° ′ ″	h m		h m		h m	°	°
16. 47	21. 21. 35	7. 53	·0878					
	***	9. 21	·0886					
17. 26	19. 35	9. 34	·0884					
18. 4	21. 30	9. 50	·0888					
18. 45	18. 30	10. 43:	·0882					
19. 48	26. 30	11. 29	·0890					
21. 3	29. 0	12. 42	·0885					
	(†)	14. 40	·0896					
		15. 0	·0901					
		15. 16	·0899					
		16. 0	·0904					
		16. 20	·0901					
		17. 12	·0905					
		18. 40	·0888					
		19. 25	·0873					
		20. 0	·0871					
		20. 15	·0863					
		20. 28	·0865					
		20. 47	·0851					
		20. 59	·0854					
		21. 40	·0846					
		22. 4	·0827					
			(†)					
July 18		July 18		July 18		July 18		
	(†)	1. 0	·0844*	0. 0	·00777	1. 0	79·0	79·0
0. 27	21. 38. 30	3. 0	·0867*	2. 45	·00432	3. 0	83·0	82·0
0. 47	37. 35	9. 0	·0857*	4. 0	·00628	9. 0	84·0	84·0
	***	21. 0	·0830*	8. 40	·00849	21. 0	77·0	76·0
1. 12	40. 30			10. 15	·00852			
1. 50	41. 20			10. 36	·00803			
2. 2	42. 30			13. 46	·01190			
2. 15	39. 10			14. 10	·01143			
2. 20	41. 10			17. 50	·01788			
2. 40	35. 50			21. 15	·01421			
2. 47	40. 0			23. 59	·01337			
3. 0	40. 0							
3. 6	43. 5							
3. 40	30. 20							
4. 0	28. 10							
4. 15	31. 5							
	***							
4. 40	30. 0							
5. 2	32. 10							
5. 37	26. 10							
5. 55	29. 25							
7. 0	26. 35							
7. 15	28. 0							
7. 43	25. 30							
7. 54	27. 10							
8. 10	26. 30							
8. 15	27. 10							
8. 32	23. 20							
8. 45	31. 5							
9. 15	16. 30							
9. 37	26. 5							
9. 46	24. 10							
9. 54	25. 20							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V. F. Magnet.
July 18								
h m	° ′ ″	h m		h m		h m	°	°
10. 10	21. 23. 50							
10. 20	29. 35							
10. 45	13. 10							
11. 3	29. 30							
11. 12	26. 20							
11. 17	29. 0							
11. 50	23. 5							
12. 2	25. 50							
12. 27	23. 35							
12. 40	25. 5							
13. 7	23. 10							
13. 30	24. 30							
13. 45	39. 5							
14. 52	25. 0							
15. 15	25. 10							
15. 30	22. 0							
16. 18	29. 5							
16. 58	27. 45							
17. 26	31. 0							
18. 29	25. 10							
18. 47	25. 30							
19. 5	23. 15							
19. 36	23. 35							
20. 0	22. 0							
20. 41	27. 10							
21. 30	26. 0							
21. 50	27. 30							
22. 16	27. 30							
22. 37	29. 25							
23. 59	31. 45							
July 19		July 19		July 19		July 19		
0. 0	21. 31. 45		(†)	0. 0	·01337	1. 0	79·0	79·0
0. 50	30. 20	0. 14	·0836	9. 13:	·00738	3. 0	81·0	80·0
1. 43	33. 0	0. 39	·0831	16. 26	·01470	9. 0	82·0	82·0
	***	1. 12	·0832	17. 15	{ ·01400 ·01280	21. 0	72·0	73·0
3. 47	32. 5	2. 29	·0861					
4. 32	30. 10	3. 12	·0872	18. 9	{ ·01305 ·01128			
5. 20	22. 35	3. 42	·0884	23. 59	·01241			
6. 28	24. 40	4. 44	·0883					
6. 52	25. 5	5. 13	·0897					
7. 24	24. 10	6. 21	·0889					
8. 4	25. 40	6. 45	·0895					
8. 37	22. 10	7. 4	·0888					
8. 51	22. 30	7. 40	·0885					
8. 57	27. 40	7. 45	·0890					
9. 20	21. 30	8. 52	·0882					
	***	9. 13	·0886					
11. 11	27. 0	9. 39	·0880					
11. 50	25. 30	10. 40	·0881					
12. 30	27. 0	10. 52	·0878					
13. 32	24. 0	11. 4	·0884					
14. 30	26. 50	12. 48	·0885					
15. 27	25. 5	13. 20	·0881					
15. 50	28. 0	14. 21	·0889					
16. 20	23. 10	14. 51	·0888					
16. 56	21. 10	15. 53	·0900					
17. 25	25. 5	16. 10	·0896					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of **the numbers included by the brace shows the amount of the displacement.**

July 18. There was no Photographic Trace for the Horizontal Force, owing to a failure in the paper.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 19		July 19						
h m	° ′ ″	h m		h m			°	
18. 25	21. 20. 45	16. 58	·0892					
18. 38	21. 20	17. 40	·0898					
18. 57	19. 0	18. 11	·0888					
21. 36	20. 5	18. 54	·0888					
23. 59	28. 0	19. 10	·0891					
		21. 55	·0890					
		23. 11	·0881					
			(†)					
July 20		July 20		July 20		July 20		
0. 0	21. 28. 0		(†)	0. 0	·01241	1. 0	72 ·0	73 ·0
1. 4	28. 30	1. 0	·0870*	2. 28	·01142	3. 0	75 ·0	76 ·0
1. 20	30. 0	1. 54	·0881	9. 40:	·00530	9. 0	77 ·0	79 ·0
1. 57	29. 30	2. 19	·0889	17. 42	·01193	21. 0	70 ·5	72 ·0
2. 26	31. 10	2. 43	·0882	18. 15	·01205			
3. 2	29. 25	3. 24	·0892		·01050			
6. 38	23. 35	4. 54	·0896	21. 30:	·01154			
8. 57	24. 10	5. 57	·0879	23. 59	·01068			
9. 28	26. 0	6. 11	·0888					
	***	6. 15	·0884					
11. 50	23. 30	6. 31	·0888					
12. 42	24. 0	6. 58	·0883					
14. 50	22. 0	8. 56	·0886					
16. 22	21. 45	9. 22	·0893					
16. 51	20. 30	9. 32	·0889					
	***	11. 12	·0886					
19. 38	18. 0	11. 22	·0889					
21. 32	22. 20	17. 30	·0898					
22. 15	25. 40	17. 43	·0895					
23. 59	29. 0	22. 36	·0885					
		23. 2	·0881					
		23. 51	·0887					
		23. 59	·0886					
July 21		July 21		July 21		July 21		
0. 0	21. 29. 0	0. 0	·0886	0. 0	·01068	1. 0	72 ·0	73 ·5
2. 22	28. 20	4. 40	·0883	1. 40	·00866	3. 0	75 ·0	76 ·0
6. 51	23. 35	6. 46	·0878	3. 50	·00570	9. 0	76 ·0	76 ·0
8. 11	23. 30	7. 23	·0885	7. 48	·00970	21. 0	71 ·0	71 ·0
8. 32	20. 50	7. 36	·0883	13. 13:	·01243			
8. 55	23. 0	7. 45	·0886	18. 50	·01902			
9. 20	23. 25	8. 21	·0881	20. 10	·01990			
9. 45	23. 50		***	21. 28	·01893			
15. 0	25. 0	10. 48	·0888	22. 33	·01867			
15. 49	20. 30	12. 40	·0887		(†)			
16. 52	20. 45	15. 15	·0899					
17. 22	19. 10	15. 43	·0897					
17. 52	20. 30	18. 4	·0897					
19. 5	21. 20	18. 40	·0885					
20. 8	23. 25	19. 43	·0885					
20. 40	23. 10	20. 57	·0871					
20. 56	24. 10	23. 59	·0859					
21. 15	23. 30							
21. 30	24. 35							
23. 45	28. 45							
23. 59	27. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 22		July 22		July 22		July 22		
h m	° ′ ″	h m				h m	°	
0. 0	21. 27. 30	0. 0	[illegible]		(†)	1. 0	74 ·0	74 ·0
0. 33	27. 20	0. 52	·0868	[illegible]. 18	·01048	3. 0	77 ·0	77 ·0
1. 22	28. 0	2. 14	·0864	6. 52	·00585	9. 0	78 ·0	79 ·5
2. 30	26. 30	2. 44	·0871	10. 59	·00732	21. 0	68 ·5	70 ·0
4. 13	27. 30	3. 30	·0874		·00667			
6. 15	25. 45	3. 45	·0871	13. 43	·01097			
7. 32	21. 30	4. 3	·0876	17. 58	·01200			
8. 13	23. 50	4. 10	·0864		·01057			
9. 5	25. 0	4. 40	·0862	20. 47	·01165			
9. 12	22. 10	5. [illegible]	·0881	23. 2	·01120			
9. 20	24. 30	6. 5	·0883		(†)			
9. 40	24. 0	6. 27	·0872					
11. 28	26. 35		***					
13. 37	24. 40	8. 13	·0886					
16. 15	25. 45	8. 43	·0883					
17. 27	23. 10	12. 12	·0881					
	***	13. 21	·0890					
19. 10	21. 50	17. 31	·0903					
20. 12	22. 0	18. 19	·0900					
21. 3	26. 0	20. 33	·0880					
21. 50	26. 0	21. 31	·0889					
23. 6	29. 0	22. 30	·0881					
23. 59	33. 20	23. 30	·0888					
			(†)					
July 23		July 23		July 23		July 23		
0. 0	21. 33. 20		(†)		(†)	1. 0	69 ·0	70 ·0
	***	0. 8	·0884	1. 0	·01804*	3. 0	69 ·0	70 ·0
0. 50	32. 0	0. 21	·0880	2. 47	·01923	9. 0	69 ·8	71 ·0
2. 30	33. 25	0. 37	·0882	4. 26	·01942	21. 45	67 ·0	67 ·0
3. 33	27. 30	1. 11	·0865	9. 36	·01877			
3. 45	29. 10	1. 54	·0888	13. 56	·01980			
4. 10	26. 5	2. 3	·0882	14. 25	·01992			
	***	2. 17	·0893		·01850			
5. 45	26. 30	2. 41	·0879	19. 4	·02123			
6. 23	23. 50	2. 58	·0883	23. 59	·02041			
	***	3. 13	·0892					
7. 45	24. 30							
	***	4. 28	·0873					
8. 35	23. 30	4. 45	·0887					
8. 55	21. 10	4. 55	·0882					
9. 15	21. 35	5. 47	·0910					
9. 40	17. 30	6. 17	·0885					
10. 16	23. 40	6. 37	·0896					
11. 28	26. 10	6. 45	·0894					
11. 50	25. 0	6. 59	·0897					
12. 20	25. 30	7. 12	·0893					
12. 57	24. 10	7. 48	·0894					
	***	8. 7	·0899					
13. 46	19. 10	8. 16	·0894					
14. 9	22. 30	8. 28	·0896					
14. 52	20. 40	8. 44	·0891					
15. 20	22. 35	9. 28	·0894					
15. 40	20. 0	9. 46	·0904					
	***	10. 42	·0889					
16. 20	21. 45	11. 51	·0893					
16. 45	19. 15	12. 21	[illegible]					
	***	12. 45	·0884					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 23		July 23						
h m	° ′ ″	h m		h m		h m	°	°
18. 32	21. 16. 35	13. 26	·0897					
	***	14. 0	·0887					
21. 25	20. 30	16. 12	·0899					
22. 40	24. 30	16. 55	·0894					
	(†)	17. 36	·0896					
			***					
		20. 9	·0871					
			***					
		23. 59	·0864					
July 24		July 24		July 24		July 24		
	(†)	0. 0	·0864	0. 0	·02041	9. 5	73 ·0	73 ·0
9. 5	21. 21. 49*	1. 48	·0870	1. 9	{ ·01937	21. 0	64 ·0	65 ·0
10. 53	25. 20	2. 21	·0877		·01800			
15. 12	23. 45	2. 37	·0876	8. 37	·01084			
15. 25	25. 40	3. 43	·0883	13. 10:	·01296			
15. 47	22. 10	5. 11	·0879	20. 47	·02141			
16. 13	25. 20	7. 29	·0878	23. 59	·01939			
16. 30	21. 30	15. 1	·0889					
17. 2	24. 0	15. 12	·0895					
	***	15. 30	·0894					
18. 33	23. 10	17. 40	·0901					
	***	19. 15	·0898					
19. 52	20. 0	20. 40	·0887					
	***	21. 0	·0889					
20. 53	20. 5	23. 12	·0875					
	***	23. 59	·0877					
22. 30	26. 25							
	(†)							
July 25		July 25		July 25		July 25		
	(†)	0. 0	·0877	0. 0	·01939	1. 0	68 ·0	69 ·0
0. 28	21. 30. 30	1. 13	·0881	1. 21	·01822	3. 0	70 ·0	71 ·0
2. 36	30. 10	1. 21	·0879	6. 15	·01094	9. 0	72 ·8	73 ·5
	***	1. 46	·0884	9. 20	·01282	21. 0	70 ·0	69 ·0
5. 23	24. 20	2. 7	·0882	15. 15	·01642			
	***	2. 28	·0889	20. 32:	·01964			
7. 10	26. 35	3. 4	·0882	23. 59	·01761			
	***	3. 30	·0888					
10. 50	24. 10	3. 40	·0885					
11. 29	25. 30	4. 14	·0896					
12. 5	23. 0	5. 5	·0882					
12. 28	25. 20	5. 28	·0881					
13. 5	20. 30	5. 45	·0897					
13. 33	25. 0	6. 14	·0889					
14. 0	20. 30	6. 41	·0893					
14. 25	25. 10		***					
14. 56	20. 45	8. 13	·0887					
	***	9. 21	·0892					
17. 52	20. 30		***					
18. 29	28. 10	11. 45	·0885					
	***	11. 57	·0882					
20. 10	19. 0	12. 40	·0890					
	***	13. 15	·0883					
21. 47	25. 30	13. 44	·0895					
22. 25	26. 45	14. 15	·0891					
22. 54	29. 30	14. 36	·0900					
	(†)	15. 13	·0896					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		July 25						
h m	° ′ ″	h m		h m		h m	°	°
		17. 44	·0896					
		18. 18	·0879					
		18. 54	·0885					
		19. 10	·0880					
		20. 20	·0881					
		21. 55	·0856					
		22. 12	·0861					
		22. 15	·0858					
		22. 50	·0865					
		23. 45	·0836					
		23. 59	·0846					
July 26		July 26		July 26		July 26		
0. 0	21. 31. 0	0. 0	·0846	0. 0	·01761	1. 0	74 ·5	74 ·7
0. 40	29. 30	0. 33	·0854	3. 15	·01241	3. 0	77 ·0	77 ·0
1. 46	32. 10	1. 10	·0869	7. 10:	·01779	9. 0	78 ·5	79 ·0
5. 15	25. 0	1. 37	·0864	11. 18	·01938	21. 0	71 ·0	72 ·0
7. 10	22. 25	1. 51	·0868	20. 33	·02906			
9. 25	22. 45	2. 10	·0858	22. 37	·02789			
10. 33	24. 30	2. 20	·0861		(†)			
14. 15	26. 20	2. 36	·0859					
15. 13	23. 45	3. 20	·0865					
15. 40	23. 30	3. 56	·0853					
16. 17	21. 40	4. 6	·0858					
16. 30	22. 0	4. 12	·0855					
17. 50	17. 30	4. 47	·0862					
18. 45	17. 25	5. 40	·0861					
19. 7	15. 30	6. 22	·0868					
19. 42	17. 25	6. 36	·0865					
19. 55	16. 50	6. 52	·0869					
20. 18	19. 30	7. 18	·0866					
21. 35	20. 0	9. 51	·0875					
23. 6	25. 10	11. 14	·0876					
	(†)	17. 15	·0892					
		18. 0	·0885					
		18. 52	·0883					
		20. 30	·0864					
		21. 56	·0860					
		22. 25	·0864					
		22. 52	·0853					
		23. 47	·0873					
		23. 59	·0873					
July 27		July 27		July 27		July 27		
	(†)	0. 0	·0873		(†)	1. 0	75 ·0	76 ·0
0. 15	21. 27. 35	0. 22	·0869	0. 26	·02541	3. 0	78 ·0	78 ·0
0. 58	29. 0	0. 51	·0878	1. 56	·02442	9. 0	79 ·5	80 ·0
1. 30	28. 0	1. 29	·0869	7. 8	·01797	21. 0	74 ·0	74 ·0
2. 26	29. 30	2. 57	·0881	13. 20	·02039			
5. 17	25. 20	6. 11	·0876	21. 20	·02621			
9. 2	24. 45	6. 54	·0879	23. 59	·02683			
	***	10. 4	·0877					
11. 15	25. 40	10. 22	·0882					
11. 32	24. 30	12. 21	·0883					
11. 40	25. 30	14. 48	·0888					
13. 40	24. 30	14. 56	·0895					
14. 45	23. 0	15. 5	·0889					
15. 3	25. 0	15. 15	·0892					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
July 27	
h m	° ′ ″
15. 37	21. 22. 10
16. 13	22. 0
	***
18. 42	16. 45
	***
22. 10	23. 20
23. 59	29. 5
July 28	
0. 0	21. 29. 5
1. 30	31. 20
3. 29	29. 30
6. 14	28. 35
9. 6	25. 0
10. 6	25. 30
10. 24	23. 25
11. 9	24. 30
12. 45	23. 30
	***
13. 46	23. 20
	***
14. 17	20. 15
14. 28	22. 10
14. 53	18. 5
	***
15. 20	18. 10
15. 37	21. 35
15. 57	15. 20
16. 10	23. 45
16. 40	18. 20
17. 9	23. 10
17. 15	21. 35
17. 32	24. 10
	***
19. 5	16. 30
19. 37	20. 35
20. 3	20. 30
20. 27	24. 10
20. 57	22. 30
23. 59	32. 30
July 29	
0. 0	21. 32. 30
2. 5	30. 25
4. 29	25. 20
7. 15	25. 5
7. 50	23. 20
8. 55	25. 30
9. 34	22. 0
10. 36	25. 35
10. 53	24. 20
11. 15	25. 50
	***
14. 23	24. 20
15. 12	25. 30
16. 10	23. 35
16. 40	25. 0
17. 7	23. 0
July 29	
h m	° ′ ″
17. 45	21. 29. 0
	***
19. 57:	19. 5
21. 58	29. 40
23. 59	32. 35
July 30	
0. 0	21. 32. 35
	***
1. 37	33. 20
3. 12	27. 10
6. 28	22. 5
	***
15. 47	22. 0
	***
18. 20	18. 15
	***
19. 40	18. 25
22. 27	25. 30
23. 59	33. 30
July 31	
0. 0	21. 33. 30
1. 45	33. 20
5. 43	23. 10
7. 18	20. 35
11. 6	24. 30
14. 50	24. 25
18. 43	19. 40
20. 25	20. 20
23. 59	35. 15
Aug. 1	
0. 0	21. 35. 15
1. 45	33. 30
4. 45	23. 10
	***
9. 27	21. 30
13. 22	24. 0
	***

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
July 27	
h m	
15. 41	·0886
17. 45	·0882
18. 28	·0873
21. 0	·0863
22. 14	·0872
23. 12	·0872
	(†)
July 28	
	(†)
0. 30	·0865
2. 50	·0865
3. 9	·0869
3. 37	·0867
3. 52	·0873
4. 13	·0870
4. 28	·0872
4. 45	·0867
6. 28	·0877
10. 3	·0879
10. 13	·0882
11. 48	·0881
12. 11	·0890
14. 12	·0893
14. 22	·0902
14. 34	·0897
15. 30	·0894
16. 40	·0880
16. 51	·0883
17. 9	·0881
17. 45	·0897
20. 9:	·0868
21. 28	·0873
22. 6	·0866
	(†)
23. 39	·0856
23. 51	·0865
23. 59	·0860
July 29	
0. 0	·0860
0. 23	·0861
0. 32	·0856
2. 12	·0870
2. 22	·0867
3. 15	·0864
3. 27	·0868
6. 11	·0861
7. 9	·0872
7. 30	·0868
8. 29	·0869
9. 0	·0881
10. 11	·0873
11. 45	·0872
14. 11	·0883
14. 57:	·0876
July 29	
h	
16. 19	·0891
17. 15	·0870
17. 39	·0872
17. 52	·0872
20. 11	·0876
20. 51	·0862
22. 18	·0861
23. 14	·0866
23. 59	·0857
July 30	
0. 0	·0857
0. 11	·0855
1. 2	·0857
1. 42	·0867
1. 51	·0862
3. 0	·0877
3. 39	·0866
3. 57	·0871
4. 21	·0869
4. 55	·0877
5. 52	·0878
6. 7	·0873
6. 27	·0880
8. 14	·0873
9. 17	·0873
10. 59	·0875
	***
16. 37	·0883
21. 22	·0862
23. 15	·0865
23. 59	·0863
July 31	
0. 0	·0863
0. 39	·0859
1. 39	·0865
1. 58	·0861
2. 37	·0872
2. 57	·0867
3. 25	·0873
3. 46	·0873
	(†)
8. 57	·0873
9. 33	·0870
16. 51	·0889
18. 13	·0886
21. 26	·0860
23. 59	·0858
Aug. 1	
0. 0	·0858
2. 10	·0880
6. 28	·0873
	***
12. 55	·0886
19. 14	·0894
19. 28	·0889

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
July 28	
0. 0	·02683
0. 31	{ ·02670 ·02583
1. 30	·02531
6. 26	·01867
12. 26	·02229
20. 25	·02897
22. 13	·02790
23. 59	·02781
July 29	
0. 0	·02781
2. 40	·02673
7. 37:	·02362
15. 3	{ ·02849 ·02798
23. 59	·02113
July 30	
0. 0	·02113
4. 13	·01965
9. 50:	·01720
10. 54	·02200
17. 45	·02074
18. 22	{ ·02100 ·02002
23. 59	·01996
July 31	
0. 0	·01996
2. 28	·01874
7. 24	·01250
13. 7	·01562
19. 28	·02169
21. 0	·02250
23. 6	{ ·02103 ·02060
23. 59	·02047
Aug. 1	
0. 0	·02047
9. 15:	·01345
19. 17	·02178
21. 46	{ ·01984 ·01943
23. 59	·01749

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 28		
1. 0	77·0	77·0
3. 0	78·0	78·0
9. 0	79·0	80·0
21. 0	73·7	74·2
July 29		
1. 0	75·0	76·0
3. 0	76·0	77·0
9. 0	75·7	77·0
21. 0	69·8	71·2
July 30		
1. 0	72·0	73·0
3. 0	73·0	74·0
9. 0	75·0	76·0
21. 50	71·0	72·0
July 31		
8. 42	75·0	75·4
21. 0	68·0	68·0
Aug. 1		
1. 0	71·0	72·0
3. 0	73·0	74·0
9. 0	73·0	73·7
21. 0	67·0	67·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 1		Aug. 1						
h m	° ′ ″	h m		h m		h m	°	°
20. 7	21. 17. 10	22. 27	·0893					
21. 54	21. 30	23. 59	·0882					
23. 59	30. 45							
Aug. 2		Aug. 2		Aug. 2		Aug. 2		
0. 0	21. 30. 45	0. 0	·0882	0. 0	·01749	1. 0	71 ·0	72 ·0
1. 20	33. 30	2. 25	·0894	9. 0:	·01163	3. 0	72 ·7	72 ·8
2. 15	33. 20	5. 11	·0889	17. 22	·01997	9. 0	72 ·4	72 ·7
3. 45	30. 30	6. 52	·0889	18. 24	·01869	21. 0	67 ·0	67 ·0
6. 0	23. 45	7. 40	·0892	18. 56	·01900			
9. 10	22. 30	12. 15	·0891	20. 45	{ ·01809			
11. 5	24. 0	15. 37	·0905		·01640			
12. 27	23. 0	17. 37	·0905	23. 59	·01362			
12. 46	24. 10	18. 30	·0894					
	***	18. 52	·0896					
16. 36	23. 5	22. 30	·0861					
19. 50	20. 10	23. 59	·0870					
21. 7	22. 10							
23. 59	33. 10							
Aug. 3		Aug. 3		Aug. 3		Aug. 3		
0. 0	21. 33. 10	0. 0	·0870	0. 0	·01362	1. 0	71 ·0	70 ·7
1. 15	34. 35	4. 52	·0881	4. 47	·00843	3. 0	73 ·8	73 ·0
2. 13	34. 10	5. 54	·0878	7. 36	·01330	9. 0	74 ·8	75 ·0
3. 40	30. 0	12. 45	·0884	13. 7	·01603	21. 0	71 ·0	72 ·0
5. 15	24. 10	16. 30	·0895	19. 40	·01971			
7. 15	22. 30	16. 58	·0899	23. 59	·01858			
15. 50	21. 45	19. 19	·0897					
17. 20	20. 50	23. 28	·0870					
	***	23. 59	·0873					
20. 21	16. 20							
21. 53	17. 35							
23. 59	26. 40							
Aug. 4		Aug. 4		Aug. 4		Aug. 4		
0. 0	21. 26. 40	0. 0	·0873	0. 0	·01858	1. 0	73 ·0	73 ·0
1. 38	30. 10	0. 52	·0872	4. 8	{ ·01460	3. 0	74 ·0	74 ·3
5. 53	22. 30		***		·01536	9. 0	72 ·5	73 ·0
	***	3. 55	·0878	9. 18	·01747	21. 0	64 ·0	65 ·0
11. 53	25. 20	4. 9	·0896	15. 36	·02600			
	***		***	19. 26	·02040			
17. 39	22. 0	7. 28	·0904	21. 51	·01895			
20. 6	20. 30	7. 46	·0900	23. 59	·01702			
	***		***					
22. 42	26. 5	11. 40	·0915					
23. 59	31. 25		***					
		17. 41	·0921					
		18. 27	·0913					
		18. 41	·0915					
		20. 12	·0925					
			***					
		23. 59	·0898					
Aug. 5		Aug. 5		Aug. 5		Aug. 5		
0. 0	21. 31. 25	0. 0	·0898	0. 0	·01702	1. 0	68 ·2	68 ·4
1. 30	33. 0	1. 25	·0895	8. 15:	·01035	3. 0	71 ·0	71 ·0
3. 20	31. 20	3. 12	·0895	18. 58	·01927	9. 0	69 ·0	70 ·3
6. 40	22. 10	3. 16	·0903	23. 59	·01649	21. 10	64 ·0	64 ·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 5		Aug. 5						
h m	° ′ ″	h m		h m		h m	°	°
8. 58	21. 23. 20	4. 10	·0896					
13. 42	23. 10	5. 7	·0904					
	***	5. 54	·0900					
20. 20	19. 25	7. 52	·0911					
22. 34	21. 30	15. 37	·0911					
23. 59	27. 10	17. 42	·0914					
		19. 30	·0910					
		20. 51	·0900					
		21. 43	·0895					
		22. 51	·0895					
		23. 19	·0899					
		23. 59	·0897					
Aug. 6		Aug. 6		Aug. 6		Aug. 6		
0. 0	21. 27. 10	0. 0	·0897	0. 0	·01649	1. 0	67 ·0	67 ·2
2. 33	28. 5	2. 11	·0897	8. 56:	·01122	3. 0	68 ·2	68 ·6
6. 0	23. 10	3. 7	·0905	18. 15	·01420	9. 0	69 ·0	70 ·0
10. 51	22. 35	5. 55	·0902	23. 59	·01278	21. 45	68 ·0	69 ·5
19. 32	16. 30	6. 51	·0910					
23. 59	27. 45	12. 30	·0907					
		15. 34	·0911					
		18. 46	·0908					
		19. 6	·0904					
		21. 10	·0891					
		21. 50	·0884					
		23. 43	·0888					
		23. 59	·0892					
Aug. 7		Aug. 7		Aug. 7		Aug. 7		
0. 0	21. 27. 45	0. 0	·0892	0. 0	·01278	8. 45	75 ·5	76 ·3
1. 52	28. 10	0. 45	·0894	2. 15	·01140	21. 0	71 ·3	72 ·4
5. 6	22. 15	2. 30	·0885	5. 4	·00750			
11. 10	23. 35	3. 6	·0891	9. 0	·01057			
11. 40	20. 30	4. 40	·0882	14. 23	·01222			
	***	5. 27	·0886	23. 28	·01609			
20. 7	16. 35	5. 47	·0885	23. 59	·01577			
22. 53	22. 0	6. 28	·0890					
23. 59	26. 10	6. 34	·0887					
		7. 51	·0895					
		8. 22	·0887					
		9. 51	·0895					
		10. 10	·0890					
		10. 45	·0895					
		11. 2	·0890					
		11. 15	·0895					
		12. 10	·0888					
		14. 11	·0893					
		14. 19	·0890					
		15. 39	·0893					
		17. 10	·0891					
		17. 43	·0893					
		20. 28	·0882					
		23. 33	·0881					
		23. 45	·0899					
		23. 52	·0896					
		23. 59	·0899					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
Aug. 8	
h m	° ′ ″
0. 0	21. 26. 10
0. 50	31. 10
2. 53	26. 0
3. 27	26. 30
3. 50	25. 25
3. 58	27. 0
5. 0	23. 25
7. 36	22. 40
8. 0	23. 20 ***
19. 36	18. 30
20. 20	21. 20
23. 59	29. 10
Aug. 9	
0. 0	21. 29. 10 ***
1. 15	31. 30 ***
3. 0	28. 25 ***
4. 57	22. 35 ***
8. 17	21. 30 ***
13. 32	22. 25
14. 25	20. 30
15. 20	21. 30
15. 44	20. 35
16. 15	23. 0 ***
17. 45	18. 5 ***
18. 22	17. 30
18. 33	19. 10
19. 13	19. 5
19. 22	16. 10
19. 40	19. 30
19. 55	17. 10
20. 15	19. 0 ***
21. 50	21. 20. 25 ***
23. 59	31. 30
Aug. 10	
0. 0	21. 31. 30 ***
1. 20	33. 0
2. 0	31. 20
2. 20	32. 25 ***
3. 50	27. 10 ***
4. 17	28. 35 ***
5. 50	21. 30 ***
6. 52	20. 30
7. 15	22. 15
7. 37	20. 30
7. 47	24. 30 ***
10. 40	19. 10 ***
12. 34	21. 30 ***
16. 15	17. 35
16. 56	17. 30
17. 17	15. 45
17. 40	17. 30
18. 2	16. 0
18. 12	17. 45 ***
20. 17	16. 40 ***
23. 59	25. 10
Aug. 11	
0. 0	21. 25. 10 ***
2. 25	27. 30
5. 20	21. 25
8. 45	21. 25
9. 25	21. 20
9. 47	18. 10
10. 18	20. 0
11. 40	20. 0
13. 29	12. 15
14. 0	15. 10
15. 0	15. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Aug. 8	
h m	
0. 0	·0899
0. 37	·0891
0. 44	·0897
1. 10	·0879
1. 16	·0884
1. 40	·0865
1. 57	·0873
2. 10	·0871
2. 40	·0877
3. 24	·0895
3. 41	·0887
3. 54	·0896
4. 18	·0875
4. 36	·0881
4. 57	·0863
5. 28	·0878
5. 40	·0876
6. 10	·0890
6. 25	·0882
6. 44	·0887
6. 51	·0884
7. 23	·0888
7. 44	·0894
8. 10	·0890 ***
16. 43	·0891 ***
20. 24	·0880 ***
23. 54	·0898
23. 59	·0894
Aug. 9	
0. 0	·0894
0. 44	·0890
1. 10	·0904
1. 57	·0887 ***
2. 55	·0908
3. 2	·0902 ***
3. 37	·0904
3. 41	·0897
4. 16	·0911
4. 36	·0898 ***
5. 5	·0890 ***
5. 54	·0908 ***
6. 58	·0915
7. 2	·0908
7. 24	·0913 ***
10. 40	·0912 ***
13. 19	·0918
14. 55	·0915 ***
16. 54	·0919 ***
21. 28	·0904
21. 50	·0907
22. 40	·0897
23. 0	·0906
23. 26	·0894
23. 59	·0892
Aug. 10	
	†
0. 32	·0908
0. 56	·0903
1. 29	·0922
2. 12	·0918
2. 28	·0929
2. 54	·0919 ***
3. 45	·0916
3. 51	·0906
4. 22	·0946
4. 54	·0916
5. 27	·0915
6. 7	·0896
6. 12	·0899
6. 17	·0896
6. 44	·0929
6. 55	·0920
7. 37	·0910
7. 47	·0928
7. 56	·0920 ***
9. 0	·0911 ***
10. 44	·0921
12. 15	·0909 ***
16. 52	·0905 ***
22. 9	·0885
22. 45	·0872
23. 5	·0874
23. 30	·0869
23. 59	·0872
Aug. 11	
0. 0	·0872
2. 57	·0881
3. 28	·0877
4. 42	·0882
4. 59	·0880
6. 12	·0893
9. 29	·0891
9. 50	·0896
10. 12	·0895
11. 11	·0895
11. 52	·0899
12. 47	·0892

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Aug. 8	
h m	
0. 0	·01577
9. 3[illegible]	·01149
21. 33	·01980
22. 17	·01902
22. 45	·01930
23. 30	·01910 ·01742
23. 59	·01753
Aug. 9	
0. 0	·01753
9. 13	·01939 ·01818
15. 45	·02061
21. 37	·02138
23. 59	·02096
Aug. 10	
0. 0	·020[illegible]
10. 15	·01878
18. 45	[illegible]
22. 3	·02077
23. 59	[illegible]
Aug. 11	
0. 0	[illegible]
2. 45	·017[illegible] [illegible]
8. 15	·01200
15. 56	·014[illegible]
21. 50	·01900
23. 59	·01761

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 8		
h m		
1. 0	73·2	74·4
3. 0	75·0	76·0
9. 0	75·0	76·4
21. 0	68·0	69·0
Aug. 9		
1. 0	66·7	68·2
3. 0	67·0	68·6
9. 0	65·0	66·0
21. 5	62·0	63·0
Aug. 10		
1. 0	[illegible]	64·8
3. 0	64·0	[illegible]
9. 0	[illegible]	66·5
21. 0	63·5	64·8
Aug. 11		
1. 0	[illegible]	[illegible]
3. 0	68·8	69·0
9. 0	[illegible]	71·2
21. 0	[illegible]	[illegible]

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
h m	° ′ ″
Aug. 11	
16. 25	21. 19. 10
17. 30	17. 30 ***
18. 35	19. 50
19. 18	14. 10
19. 40	16. 20 ***
20. 26	15. 0 ***
23. 59	29. 0
Aug. 12	
0. 0	21. 29. 0
1. 54	31. 5
5. 3	22. 5
5. 26	22. 10
5. 58	21. 20
10. 40	21. 25 ***
11. 52	23. 5
13. 15	20. 0
15. 8	20. 30 ***
17. 56	17. 45
18. 30	19. 35
20. 21	18. 35
21. 45	22. 30
23. 40	28. 30
23. 59	28. 25
Aug. 13	
0. 0	21. 28. 25
2. 40	28. 0
5. 30	21. 35
6. 23	21. 35
6. 57	20. 45 ***
10. 40	22. 0 ***
14. 45	20. 30
15. 38	25. 10
19. 0	15. 10
19. 33	15. 30
19. 53	17. 30
20. 22	17. 20 ***
23. 59	28. 30
Aug. 14	
0. 0	21. 28. 30
1. 32	31. 30
2. 43	21. 29. 35
5. 6	21. 30
8. 3	19. 35
12. 26	21. 30
13. 3	23. 50 ***
19. 6	16. 0
19. 33	13. 20
20. 5	14. 0
20. 45	12. 30
22. 10	18. 30
23. 59	31. 30
Aug. 15	
0. 0	21. 31. 30
1. 53	35. 10
6. 30	23. 30
8. 22	21. 25 ***
14. 2	23. 50 ***
14. 47	21. 45
15. 40	22. 10
15. 57	26. 20
17. 3	11. 30
17. 17	9. 40
17. 38	11. 45
17. 50	10. 0 ***
18. 40	16. 30
19. 17	9. 0
19. 26	14. 0
19. 35	11. 10
19. 40	13. 50
19. 46	11. 15
19. 55	14. 35
20. 7	10. 0 ***
20. 35	13. 10
20. 40	16. 5
20. 43	13. 0
20. 50	17. 0
21. 10	15. 0
21. 33	25. 5
21. 40	20. 20 ***
22. 3	26. 5
22. 15	25. 0
22. 58	30. 30
23. 10	29. 45 ***
23. 59	31. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
Aug. 11	
15. 15	·0892
16. 12	·0895
16. 52	·0903
17. 30	·0893
18. 26	·0895
19. 36	·0881
20. 13	·0879
20. 40	·0881
21. 28	·0872
23. 15	·0873
23. 29	·0869
23. 59	·0867
Aug. 12	
0. 0	·0867
0. 30	·0864
1. 12	·0864
1. 43	·0869
2. 13	·0864 ***
4. 13	·0876
4. 27	·0871
4. 52	·0873
5. 14	·0881
5. 39	·0880
5. 52	·0871 ***
8. 39	·0875 ***
12. 30	·0888 ***
16. 40	·0911 ***
19. 41	·0902
22. 20	·0863
23. 59	·0867
Aug. 13	
0. 0	·0867
0. 36	·0873
1. 0	·0868
4. 17	·0871
6. 15	·0880
7. 17	·0876
7. 45	·0878
8. 12	·0883
8. 42	·0876
9. 0	·0882
15. 16	·0888
16. 50	·0895
19. 2	·0891
21. 10	·0872
22. 52	·0863
23. 59	·0869
Aug. 14	
0. 0	·0869
1. 45	·0880
2. 11	·0877
3. 12	·0880
4. 58	·0872
7. 29	·0875
8. 0	·0882
8. 30	·0880
9. 10	·0894 ***
16. 52	·0911
18. 9	·0910
21. 50	·0890
22. 0	·0880
22. 33	·0873
22. 50	·0881
23. 18	·0875
23. 59	·0883
Aug. 15	
0. 0	·0883 ***
4. 6	·0897
5. 45	·0897
6. 14	·0900
6. 34	·0896
7. 35	·0897
7. 50	·0892
11. 18	·0900
12. 30	·0910
13. 25	·0911
14. 17	·0921
14. 37	·0916
15. 12	·0920
15. 38	·0916
16. 10	·0921
16. 51	·0908
17. 48	·0912
18. 21	·0905
18. 37	·0907
19. 0	·0900
19. 27	·0905
20. 57	·0864 ***
22. 33	·0868
22. 55	·0859
23. 59	·0885

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Aug. 12	
0. 0	·01761
3. 44	·01228
6. 58:	·01742
11. 10	·01984
18. 46	·02963
22. 15	·02649
22. 54	·02641
23. 59	·02539
Aug. 13	
0. 0	·02539
2. 32	·02241
5. 40	·01730
8. 4	·01993
14. 15	·02260
20. 17	·02549
23. 59	·02559
Aug. 14	
0. 0	·02559
2. 5	·02583
4. 30	·02288
7. 22	{ ·02561 { ·02102
9. 10	·02130
17. 46	·02867
20. 56	[illegible]
22. 20	·02919
23. 59	·02882
Aug. 15	
0. 0	·02882
2. 4	·02862
9. 9:	·02603
16. 5	{ ·02981 { ·02937
21. 30	·02451
23. 59	·02336

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Aug. 12		
1. 0	70·0	70·0
3. 0	73·0	72·8
9. 0	65·8	66·0
21. 0	66·0	67·0
Aug. 13		
1. 0	71·0	72·0
3. 0	74·0	74·0
9. 0	75·0	75·2
22. 14	68·0	69·0
Aug. 14		
8. 42	70·8	71·0
21. 0	65·0	66·0
Aug. 15		
1. 0	66·0	67·0
3. 0	67·5	68·0
9. 0	67·0	69·0
21. 0	60·0	61·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
Aug.16	
h m	° ' "
0. 0	21. 31. 30
1. 18	32. 0
1. 37	32. 50
1. 56	32. 10
2. 15	32. 30
2. 42	29. 50
3. 7	31. 35
3. 42	28. 10
	***
7. 40	21. 0
	***
10. 57	23. 20
11. 15	22. 5
	***
13. 0	22. 0
13. 22	23. 35
13. 40	22. 10
14. 2	28. 0
14. 46	23. 20
16. 37	22. 30
17. 15	31. 30
18. 15	20. 45
18. 42	23. 40
19. 10	23. 30
19. 40	18. 15
20. 26	21. 20
20. 47	25. 10
21. 28	21. 30
23. 10	28. 0
23. 36	27. 10
23. 59	30. 0
Aug.17	
0. 0	21. 30. 0
	***
0. 40	32. 20
0. 57	31. 30
1. 10	34. 0
1. 43	30. 25
	***
3. 17	30. 20
4. 40	24. 10
5. 26	23. 0
5. 36	21. 23. 30
6. 18	21. 10
6. 30	21. 35
7. 8	18. 0
7. 56	21. 20
8. 20	19. 30
8. 33	21. 10
9. 38	20. 45
9. 50	21. 50
10. 22	15. 0
10. 36	19. 0
10. 45	18. 0
10. 51	19. 20
11. 6	16. 35
11. 10	17. 35
11. 26	15. 0
11. 45	16. 50
12. 0	16. 30
12. 47	19. 0
13. 3	17. 30
13. 30	29. 30
14. 6	14. 45
	***
14. 50	16. 30
15. 10	12. 5
15. 20	14. 5
15. 30	13. 10
16. 16	18. 20
16. 40	16. 30
	***
17. 27	17. 35
17. 40	16. 20
18. 0	20. 30
	***
19. 5	16. 45
19. 18	20. 35
19. 42	16. 15
20. 22	22. 40
20. 37	21. 0
	***
21. 43	28. 35
	***
22. 20	25. 40
22. 36	27. 0
23. 4	25. 0
	***
23. 59	28. 25
Aug.18	
0. 0	21. 28. 25
	***
1. 50	28. 10
2. 13	25. 35
3. 15	25. 0
3. 40	22. 30
	***
4. 40	22. 20
	***

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Aug.16	
h m	
0. 0	·0885
0. 35	·0874
1. 0	·0879
1. 14	·0872
1. 32	·0877
1. 49	·0871
2. 0	·0877
2. 30	·0868
3. 5	·0885
3. 30	·0862
3. 58	·0863
4. 17	·0873
4. 45	·0873
5. 2	·0881
	***
6. 27	·0887
6. 41	·0882
6. 58	·0890
7. 21	·0885
7. 37	·0887
8. 21	·0883
8. 34	·0886
9. 22	·0885
12. 44	·0895
12. 53	·0892
13. 27	·0899
13. 42	·0894
13. 58	·0898
15. 22	·0898
16. 21	·0907
16. 54	·0898
17. 37	·0912
17. 52	·0908
18. 3	·0910
18. 27	·0904
19. 0	·0904
19. 16	·0894
20. 30	·0880
20. 44	·0888
21. 15	·0889
21. 36	·0897
21. 46	·0891
22. 51	·0882
23. 10	·0894
23. 28	·0887
23. 59	·0887
Aug.17	
0. 0	·0887
0. 14	·0899
0. 51	·0897
1. 5	·0905
1. 50	·0888
2. 14	·0901
2. 29	·0905
3. 0	·0893
3. 22	·0910
4. 10	·0905
4. 27	·0913
4. 50	·0908
5. 12	·0914
5. 30	·0911
5. 50	·0920
6. 24	·0915
6. 40	·0920
7. 5	·0906
7. 30	·0917
7. 55	·0913
8. 7	·0917
8. 28	·0909
8. 40	·0912
9. 13	·0905
10. 7	·0912
10. 12	·0919
10. 30	·0897
10. 42	·0905
10. 48	·0900
10. 53	·0903
11. 5	·0895
11. 15	·0907
11. 28	·0903
12. 30	·0906
12. 50	·0915
13. 11	·0909
13. 41	·0927
13. 57	·0904
14. 14	·0901
14. 35	·0903
15. 20	·0917
	***
16. 0	·0914
16. 13	·0918
16. 51	·0906
17. 42	·0909
17. 55	·0915
18. 15	·0905
18. 46	·0902
19. 15	·0908
19. 42	·0903
20. 34	·0873
21. 6	·0878
22. 3	·0870
22. 28	·0876
23. 59	·0874
Aug.18	
0. 0	·0874
0. 22	·0881
0. 38	·0878
0. 47	·0883
1. 7	·0882
1. 42	·0894
2. 7	·0879
2. 22	·0890
2. 33	·0887

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Aug.16	
h m	
0. 0	·02336
1. 3	·02277
6. 44	·01527
8. 33	·01658
14. 20	·01857
21. 15	·02344
23. 59	·02390
Aug.17	
0. 0	·02390
2. 42	·02391
11. 46	·01917
13. 37	·01900
14. 7	·01821
14. 40	·01868
22. 37	·02002
23. 59	·01973
Aug.18	
0. 0	·01973
1. 27	·01957
4. 50	·01740
7. 37	·01928
10. 6	·01984
12. 32	·01969
17. 21	·02263
21. 26	·02582
23. 59	·02556

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.16		
h m		
1. 0	63·7	65·0
3. 0	66·0	67·0
9. 0	68·0	69·8
21. 0	63·0	64·0
Aug.17		
1. 0	65·0	66·0
3. 0	66·0	67·7
9. 0	69·0	70·0
21. 0	68·0	69·0
Aug.18		
1. 0	70·0	71·0
3. 0	72·0	73·0
9. 0	74·0	74·8
21. 0	68·0	69·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug.18		Aug.18						
h m	° ′ ″	h m		h m		h m	°	°
5. 7	21. 19. 25	2. 52	·0898					
5. 36	21. 30	3. 0	·0895					
6. 13	17. 30	3. 14	·0899					
7. 22	22. 0	3. 55	·0885					
7. 57	21. 30	4. 10	·0890					
8. 15	22. 40	4. 27	·0884					
9. 20	21. 10	4. 40	·0897					
9. 43	23. 0	4. 45	·0892					
10. 13	17. 0	5. 4	·0905					
10. 53	5. 0	5. 16	·0899					
11. 34	14. 50	5. 44	·0889					
11. 50	10. 0	6. 5	·0900					
12. 53	16. 45	6. 21	·0905					
13. 23	20. 40	7. 36	·0886					
14. 40	22. 35	8. 7	·0896					
15. 0	26. 10	8. 15	·0885					
15. 56	21. 30	8. 36	·0897					
	***	8. 55	·0891					
16. 38	20. 35	9. 21	·0903					
17. 0	22. 30	10. 6	·0891					
17. 26	22. 30		***					
18. 24	17. 45	11. 5	·0918					
18. 55	20. 20	11. 44	·0873					
	***	12. 0	·0882					
19. 47	18. 25	12. 12	·0878					
19. 53	17. 0	12. 37	·0877					
20. 15	17. 10	13. 13	·0888					
20. 47	21. 50	13. 45	·0891					
21. 6	21. 35	14. 6	·0886					
	***	14. 44	·0897					
21. 53	26. 0	14. 54	·0896					
22. 10	24. 10	15. 40	·0905					
22. 40	28. 0	15. 45	·0902					
23. 59	29. 30	16. 0	·0906					
		16. 30	·0898					
		16. 40	·0901					
		17. 10	·0891					
		17. 52	·0902					
		18. 18	·0897					
		18. 28	·0900					
			***					
		21. 6	·0864					
			***					
		23. 16	·0850					
		23. 28	·0855					
		23. 43	·0849					
		23. 59	·0862					
Aug·19		Aug·19		Aug.19		Aug·19		
0. 0	21. 29. 30	0. 0	·0862	0. 0	·02556	1. 0	72·5	73·8
0. 20	30. 5	0. 14	·0865	2. 10	·02342	3. 0	74·0	75·5
0. 53	28. 10	0. 50	·0865	4. 25	{ ·01983	9. 0	77·0	77·8
1. 20	29. 35	1. 12	·0873		·02039	21. 0	67·8	69·0
	***	1. 52	·0846	7. 51	·02451			
4. 9	26. 30	2. 18	·0856	13. 29	·02670			
	***	2. 30	·0855	20. 46	·03506			
6. 54	21. 35	2. 56	·0868	23. 59	·03243			
7. 33	9. 30	3. 6	·0866					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug·19		Aug·19						
h m	° ′ ″	h m		h m		h m	°	°
8. 8	21. 18. 20	3. 35	·0879					
8. 15	16. 45	3. 51	·0868					
8. 52	21. 35	4. 21	·0873					
	***	4. 43	·0864					
11. 7	20. 30	4. 57	·0861					
11. 33	24. 25	5. 15	·0872					
11. 48	21. 30	5. 40	·0873					
12. 10	25. 0	5. 51	·0882					
13. 15	19. 30	6. 13	·0871					
13. 50	20. 20	6. 52	·0891					
	***	7. 15	·0873					
14. 40	22. 35	7. 50	·0903					
14. 56	22. 10	8. 13	·0886					
15. 48	27. 30	8. 27	·0888					
16. 57	20. 0	9. 8	·0878					
17. 7	21. 30	9. 18	·0883					
17. 32	19. 0		***					
17. 50	19. 0	10. 14	·0881					
18. 6	22. 0	11. 28	·0893					
	***	11. 42	·0890					
18. 52	20. 30	12. 42	·0896					
19. 17	17. 20	13. 7	·0892					
19. 30	19. 10	13. 18	·0895					
19. 45	16. 30	14. 7	·0859					
	***	14. 15	·0891					
20. 36	15. 30	14. 37	·0884					
21. 53	22. 25	15. 10	·0889					
23. 59	27. 45	15. 36	·0883					
		16. 40	·0896					
		16. 50	·0895					
		17. 0	·0900					
		17. 43	·0895					
		18. 0	·0887					
		19. 16	·0882					
		19. 31	·0886					
		20. 36	·0869					
		21. 0	·0877					
		22. 15	·0864					
		23. 33	·0856					
		23. 59	·0859					
Aug·20		Aug·20		Aug·20		Aug.20		
0. 0	21. 27. 45	0. 0	·0859	0. 0	·03243	1. 0	72·5	73·0
1. 10	31. 10	0. 21	·0864	4. 17	·02384	3. 0	76·0	77·0
2. 23	31. 10	1. 44	·0848	7. 30;	·03057	9. 0	78·0	79·0
	***	2. 14	·0858	12. 20	·03254	22. 15	69·0	70·0
4. 26	24. 0	2. 37	·0852	17. 20	·03609			
5. 45	18. 0	2. 50	·0856	21. 46	·04059			
6. 53	18. 5	3. 40	·0854	22. 33	·04076			
11. 34	21. 10	3. 54	·0865	23. 59	·03957			
12. 2	20. 0	4. 9	·0861					
12. 12	21. 20	4. 21	·0870					
12. 37	20. 30	4. 46	·0860					
13. 6	21. 25		***					
13. 18	21. 10	6. 15	·0878					
16. 0	22. 10	6. 50	·0871					
	***	14. 13	·0886					
20. 0	16. 10	15. 7	·0883					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug.20		Aug.20						
h m	° ′ ″	h m		h m		h m	°	°
20. 59	21. 17. 20	18. 43	·0882					
23. 59	32. 25	21. 35	·0871					
		22. 8	·0874					
		23. 15	·0859					
		23. 40	·0865					
		23. 59	·0866					
Aug.21		Aug.21		Aug.21		Aug.21		
0. 0	21. 32. 25	0. 0	·0866	0. 0	·03957	9. 55	71 ·8	73 ·0
	***	2. 25	·0871	2. 7	·03900	21. 0	62 ·8	64 ·3
1. 32	32. 20	3. 11	·0879	9. 28	·03421			
	***	3. 28	·0891	16. 22	·03982			
5. 44	21. 30	4. 19	·0881	19. 10	·03530			
6. 30	13. 30	4. 44	·0883	21. 15	·03316			
7. 50	19. 50	4. 54	·0891	23. 59	·03176			
9. 22	21. 10	5. 10	·0885					
9. 45	12. 30	5. 15	·0896					
10. 27	20. 0	5. 54	·0894					
10. 42	18. 30	6. 12	·0884					
10. 57	20. 5	6. 37	·0906					
	***	6. 43	·0894					
12. 40	18. 0	6. 55	·0894					
12. 57	20. 30	7. 18	·0883					
13. 40	18. 10	7. 33	·0889					
13. 58	20. 20	8. 16	·0892					
14. 40	15. 45	8. 54	·0899					
15. 11	15. 0	9. 10	·0897					
15. 36	18. 30	9. 15	·0900					
15. 50	18. 50	9. 34	·0887					
15. 56	21. 45	9. 45	·0897					
16. 6	20. 20	10. 25	·0890					
	***	11. 15	·0898					
17. 7	21. 30	11. 33	·0890					
17. 26	24. 45	12. 11	·0891					
18. 0	20. 30	12. 45	·0900					
18. 15	21. 25	13. 12	·0903					
19. 0	16. 30	13. 26	·0898					
19. 40	20. 20	13. 42	·0896					
20. 3	18. 30	14. 0	·0904					
20. 35	19. 0	14. 16	·0900					
20. 50	18. 0	14. 33	·0902					
23. 15	31. 45	14. 57	·0895					
23. 59	32. 20	15. 15	·0893					
		15. 50	·0904					
		16. 30	·0899					
		18. 11	·0911					
		19. 30	·0903					
		22. 6	·0868					
		22. 45	·0864					
		23. 59	·0877					
Aug.22		Aug.22		Aug.22		Aug.22		
0. 0	21. 32. 20	0. 0	·0878	0. 0	·03176	1. 0	67 ·0	68 ·0
1. 17	31. 30	0. 38	·0893	3. 7	·02841	3. 0	69 ·8	71 ·0
1. 40	32. 10	1. 21	·0888	5. 30	·02358	9. 0	73 ·5	74 ·5
2. 45	27. 20	1. 37	·0883	9. 13	·02860	21. 0	66 ·0	67 ·0
3. 10	28. 40	1. 50	·0890	12. 0	·02941			
4. 7	26. 30	2. 41	·0863	20. 47	·03782			
Aug.22		Aug.22		Aug.22				
h m	° ′ ″	h m		h m		h m	°	°
4. 30	21. 22. 20	3. 6	·0844	21. 14	·03703 ·03558			
5. 15	20. 20	3. 37	·0877					
5. 26	17. 0	4. 0	·0883	23. 59	·03482			
5. 47	16. 0	4. 15	·0878					
6. 30	20. 50	4. 42	·0890					
7. 15	18. 30	4. 58	·0884					
7. 36	19. 10	5. 34	·0898					
7. 53	18. 30	5. 45	·0896					
8. 12	20. 0	6. 0	·0904					
8. 40	18. 5	6. 12	·0895					
9. 0	20. 0	6. 34	·0889					
9. 4	23. 50	7. 17	·0892					
9. 13	19. 45	7. 41	·0883					
9. 42	20. 10	7. 54	·0891					
10. 9	23. 15	8. 14	·0881					
	***	8. 21	·0887					
11. 12	17. 50	8. 37	·0883					
11. 22	18. 40	9. 5	·0893					
11. 38	16. 0	9. 40	·0885					
12. 2	21. 20	9. 57	·0895					
12. 23	18. 0	10. 45	·0893					
12. 27	19. 10	10. 55	·0900					
12. 45	17. 30	11. 37	·0897					
	***	11. 55	·0888					
14. 0	23. 50	12. 10	·0893					
14. 52	19. 30	12. 41	·0894					
	***	12. 54	·0891					
18. 36	17. 10	13. 53	·0898					
18. 50	15. 30	14. 24	·0907					
	***	14. 51	·0902					
20. 53	17. 35		***					
22. 26	22. 0	19. 13	·0906					
22. 42	24. 0	22. 58	·0886					
23. 25	24. 35	23. 30	·0895					
23. 40	26. 0	23. 44	·0887					
23. 52	25. 10	23. 59	·0896					
23. 59	26. 10							
Aug.23		Aug.23		Aug.23		Aug.23		
0. 0	21. 26. 15	0. 0	·0896	0. 0	·03482	1. 0	69 ·5	71 ·0
	***	0. 47	·0892	1. 8	·03360	3. 0	72 ·3	73 ·8
2. 0	26. 30	0. 57	·0883	4. 20	·02657	9. 0	74 ·3	75 ·3
2. 36	27. 20	2. 45	·0887	5. 0	·02878	21. 0	67 ·0	68 ·0
4. 53	22. 30	4. 39	·0881	6. 13	·02857			
5. 15	20. 30	4. 52	·0887	6. 42	·03143			
5. 27	18. 0	5. 13	·0891	8. 52	·03310			
5. 45	18. 20	5. 21	·0887	11. 32	·03380			
6. 4	17. 20	5. 30	·0893	15. 21	·03540			
7. 6	20. 20	6. 45	·0875	19. 30	·04141			
10. 50	21. 30	10. 32	·0889	21. 42	·03774			
11. 30	20. 20	12. 41	·0887	23. 59	·03620			
13. 7	22. 35	12. 51	·0895					
13. 17	21. 20	13. 9	·0880					
13. 40	22. 10	13. 25	·0899					
13. 55	21. 0	14. 5	·0898					
14. 20	24. 10	14. 24	·0917					
15. 9	16. 0	15. 13	·0884					
15. 32	20. 10	15. 40	·0896					
	***							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 23		Aug. 23						
h m	° ′ ″	h m		h m		h m	°	°
16. 28	21. 15. 30	15. 59	·0903					
18. 20	16. 40	16. 45	·0905					
	***	17. 6	·0899					
19. 2	13. 25	17. 43	·0897					
19. 13	16. 40	18. 10	·0902					
	***		***					
19. 50	15. 0	21. 45	·0882					
	***		***					
22. 0	23. 20	23. 28	·0883					
23. 30	32. 10	23. 44	·0871					
23. 59	30. 25	23. 59	·0871					
Aug. 24		Aug. 24		Aug. 24		Aug. 24		
0. 0	21. 30. 25	0. 0	·0871	0. 0	·03620	1. 0	73·0	74·0
0. 57	32. 10	0. 19	·0880	4. 3	·02871	3. 0	76·0	76·8
2. 30	30. 30	0. 28	·0878	6. 10	·03562	9. 0	77·0	77·0
4. 4	23. 30	0. 47	·0885	10. 40	·03807	21. 0	69·0	70·0
6. 7	19. 30	1. 15	·0879	15. 37	·04313			
8. 17	20. 35	2. 13	·0881		(†)			
8. 45	17. 30	2. 22	·0889	18. 27	·04317			
9. 20	20. 45	3. 21	·0868	20. 48	·04069			
10. 20	21. 30	3. 44	·0867		(†)			
16. 8	21. 20	4. 5	·0871					
17. 58	18. 20	5. 15	·0872					
18. 26	17. 10	5. 42	·0877					
18. 50	15. 30	6. 28	·0877					
19. 48	15. 10	7. 43	·0886					
22. 26	25. 25	10. 9	·0887					
23. 59	28. 30	12. 51	·0897					
		15. 2	·0899					
		17. 36	·0897					
		17. 58	·0900					
		18. 26	·0893					
		18. 52	·0896					
		19. 54	·0889					
		20. 21	·0891					
		22. 30	·0866					
		23. 50	·0872					
		23. 59	·0869					
Aug. 25		Aug. 25		Aug. 25		Aug. 25		
0. 0	21. 28. 30	0. 0	·0869		(†)	1. 0	75·0	76·0
0. 47	31. 0	0. 22	·0879	1. 0	·02335*	3. 0	78·0	79·0
4. 20	25. 10	0. 33	·0873	2. 10	·02420	9. 0	80·0	80·0
5. 30	21. 30	0. 42	·0875	2. 44	{ ·02533	21. 0	72·0	73·0
9. 3	20. 10	1. 42	·0863		·02890			
9. 18	22. 0	2. 45	·0866	4. 50	·03382			
9. 53	19. 10	3. 15	·0880		***			
11. 0	21. 25	3. 40	·0872	6. 6	·03517			
12. 40	19. 25	4. 30	·0883	10. 4	·03580			
12. 58	23. 10	5. 0	·0869	13. 29	·03924			
13. 27	20. 30	5. 39	·0870	15. 42	·04238			
	***	6. 37	·0879	21. 20	{ ·03649			
18. 26	18. 45	6. 54	·0875		·03458			
18. 42	17. 10	7. 27	·0878	22. 13	{ ·03420			
18. 52	18. 15	7. 41	·0861		·03357			
19. 5	17. 10	8. 13	·0884	23. 49	{ ·03346			
	***	8. 51	·0886		·02777			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 25		Aug. 25		Aug. 25				
h m	° ′ ″	h m		h m		h m	°	°
20. 33	21. 18. 0	9. 30	·0882	23. 59	·02780			
22. 12	28. 45	9. 51	·0886					
22. 37	29. 30	10. 13	·0874					
23. 0	32. 20	10. 28	·0873					
23. 45	36. 15	11. 0	·0885					
	***	11. 13	·0882					
23. 59	35. 10	12. 40	·0883					
		13. 28	·0902					
		14. 44	·0900					
		16. 42	·0905					
		21. 30	·0878					
		21. 59	·0867					
		22. 30	·0870					
		22. 45	·0867					
		23. 45	·0885					
		23. 59	·0876					
Aug. 26		Aug. 26		Aug. 26		Aug. 26		
0. 0	21. 35. 5	0. 0	·0875	0. 0	·02780	1. 0	74·0	74·8
	***	0. 11	·0869	1. 28	{ ·02758	3. 0	74·5	75·0
0. 37	33. 20	0. 49	·0865		·02520	9. 0	73·0	74·0
	***	1. 15	·0873	9. 26	·02522	21. 0	67·0	68·0
1. 46	40. 0	1. 49	·0900	14. 41	·02803			
2. 8	35. 50	2. 9	·0891	23. 59	·02361			
2. 40	36. 0	2. 36	·0905					
3. 7	30. 30	3. 10	·0884					
	***	3. 27	·0885					
4. 10	29. 10	4. 19	·0900					
4. 50	23. 30	4. 40	·0890					
	***	5. 43	·0896					
7. 20	21. 5	6. 3	·0904					
7. 30	19. 10	6. 30	·0897					
7. 52	20. 15	7. 0	·0905					
8. 50	16. 15	7. 39	·0907					
9. 4	17. 35	7. 54	·0900					
9. 36	15. 30	8. 13	·0905					
	***	8. 33	·0900					
10. 35	18. 35	9. 0	·0904					
11. 6	15. 5	9. 41	·0897					
11. 34	21. 30	10. 11	·0896					
12. 5	17. 25	10. 28	·0902					
	***	11. 45	·0889					
13. 26	17. 30	12. 15	·0902					
13. 40	16. 20	13. 14	·0909					
13. 59	17. 15	13. 43	·0900					
14. 15	16. 0	14. 15	·0898					
14. 36	20. 10	14. 36	·0903					
15. 26	23. 35	14. 54	·0901					
15. 56	20. 50	15. 12	·0909					
16. 26	20. 30	16. 11	·0903					
17. 45	13. 30	16. 30	·0907					
	***	17. 45	·0907					
19. 9	12. 10	19. 9	·0894					
19. 26	11. 5	21. 48	·0875					
19. 45	12. 10	22. 42	·0877					
20. 22	11. 35	22. 58	·0890					
	***	23. 6	·0886					
23. 25	28. 30	23. 11	·0894					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.26		**Aug.26**						
h m	° ′ ″	h m		h m		h m		
23. 40	21. 27. 10	23. 18	·0881					
23. 59	28. 30	23. 51	·0891					
		23. 59	·0886					
Aug.27		**Aug.27**		**Aug.27**		**Aug.27**		
0. 0	21. 28. 30	0. 0	·0886	0. 0	·02361	1. 0	69·0	70·0
	***		***	2. 20	·02296	3. 0	71·0	72·0
0. 35	31. 40	0. 39	·0896	8. 50	·01617	9. 0	73·8	74·0
	***	0. 46	·0891	19. 57	·02470	22. 30	64·0	65·6
0. 50	30. 30	0. 56	·0895	21. 3	·02291			
1. 7	31. 30	1. 29	·0887	23. 59	·02143			
	***	1. 36	·0892					
2. 40	30. 0	2. 13	·0889					
3. 9	26. 40	2. 20	·0894					
	***	2. 57	·0885					
8. 40	20. 10	3. 18	·0884					
8. 50	23. 10	3. 40	·0894					
	***	4. 9	·0890					
9. 50	19. 0	4. 44	·0898					
	***	5. 19	·0886					
10. 45	21. 10	5. 40	·0895					
	***	6. 14	·0896					
11. 58	19. 15	6. 30	·0903					
12. 20	21. 20	7. 35	·0895					
13. 30	18. 30	8. 29	·0898					
14. 38	18. 30	9. 24	·0887					
15. 3	17. 10	10. 24	·0901					
15. 45	18. 0	10. 40	·0892					
17. 10	18. 0	11. 11	·0895					
17. 40	16. 20	11. 39	·0887					
18. 10	18. 15	12. 0	·0897					
	***	12. 27	·0891					
19. 20	14. 30	13. 13	·0900					
19. 30	16. 0	13. 45	·0891					
19. 36	15. 10	14. 15	·0895					
19. 42	21. 17. 0	15. 7	·0891					
19. 50	20. 55. 10	17. 6	·0895					
20. 17	21. 12. 0	19. 30	·0887					
20. 38	15. 10	19. 45	·0863					
20. 40	12. 10		***					
20. 45	16. 20	20. 52	·0878					
20. 51	9. 0		***					
20. 58	11. 20	21. 15	·0863					
21. 10	7. 10		***					
21. 22	17. 25	21. 59	·0914					
21. 33	11. 10	22. 12	·0891					
21. 40	15. 35		***					
21. 45	8. 10	22. 58	·0909					
22. 0	18. 0	23. 13	·0897					
	***	23. 24	·0921					
23. 59	31. 30	23. 59	·0897					
Aug.28		**Aug.28**		**Aug.28**		**Aug.28**		
0. 0	21. 31. 30	0. 0	·0897	0. 0	·02143	8. 25	67·0	68·6
1. 20	30. 20	0. 22	·0948	2. 17	·02120	21. 0	63·0	64·0
1. 58	28. 20	0. 48	·0894	3. 15	·02170			
2. 15	29. 30	1. 48	·0907	6. 40	·01969			
2. 24	27. 10	2. 7	·0947	9. 4	·01880			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.28		**Aug.28**		**Aug.28**				
h m	° ′ ″	h m		h m				
2. 30	21. 29. 0	2. 15	·0953	10. 35	[illegible]			
2. 50	26. 50		***	[illegible]	·02019			
4. 23	26. 30	2. 47	·0948	11. 15	[illegible]			
	***	3. 30	·0890	11. 46	·01510			
5. 10	13. 30		***	12. 0	·01512			
5. 23	12. 30	4. 28	·0898	12. 20	[illegible]			
5. 45	15. 30	5. 0	·0926	12. 37	[illegible]			
5. 57	13. 25	5. 13	·0924	12. 45	·00519			
6. 23	20. 0	5. 25	·0935	13. 2	·01561			
7. 4	19. 10	5. 50	·0905	13. 21	·00263			
7. 7	21. 20		***	13. 26	·01338			
7. 20	17. 30	6. 45	·0933	13. 33	·01541			
7. 40	19. 20	7. 0	·0922	13. 46	·01142			
7. 56	16. 0	7. 9	·0925	13. 53	·01800			
8. 4	23. 10	7. 45	·0904		***			
8. 15	17. 15	7. 58	·0926	14. 6	·01647			
8. 26	20. 10	8. 19	·0897	14. 9	·01836			
8. 30	18. 0	8. 28	·0903	14. 17	·01424			
8. 42	21. 20	8. 42	·0899	14. 20	·01538			
8. 53	33. 10	9. 15	·0916	14. 27	·01340			
9. 3	24. 0	9. 24	·0909	14. 36	·01560			
	(†)	9. 39	·0921	14. 40	·01413			
11. 10	33. 10	9. 42	·0917	15. 0	·02001			
11. 15	21. 52. 10	9. 51	·0929	15. 20	·01650			
11. 20	20. 57. 30		(†)	15. 46	·01892			
11. 30	21. 2. 0	21. 0	·0832*		***			
11. 33	20. 58. 45			16. 10	·01900			
11. 38	21. 52. 10			16. 49	·02263			
11. 58	21. 28. 0			17. 20	·01153			
12. 10	20. 54. 10				***			
12. 16	56. 30			18. 10	·00840			
12. 20	20. 48. 30				***			
12. 32	21. 2. 0			19. 13	·01540			
12. 34	20. 53. 25				***			
12. 37	57. 0			21. 12	·01909			
12. 40	52. 35				***			
12. 42	56. 5			21. 40	·02154			
12. 46	47. 10				***			
12. 50	56. 15			22. 6	·02251			
12. 55	20. 50. 5			22. 12	·02240			
12. 57	21. 43. 10			22. 43	·02120			
13. 12	20. 54. 50				***			
13. 20	21. 48. 20			23. 59	·02143			
13. 28	31. 10							
13. 31	35. 30							
13. 37	16. 15							
13. 41	35. 30							
13. 43	25. 35							
13. 50	42. 5							
13. 54	27. 20							
14. 0	41. 10							
14. 4	53. 5							
14. 7	41. 15							
14. 13	31. 0							
14. 17	35. 0							
14. 20	27. 10							
14. 25	30. 0							
14. 27	22. 10							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 28								
h m	° ′ ″	h m		h m		h m	°	°
14. 32	21. 33. 0							
14. 34	18. 10							
14. 37	29. 25							
14. 40	19. 0							
14. 43	28. 0							
14. 45	16. 50							
14. 50	35. 40							
14. 56	22. 10							
15. 2	53. 20							
15. 13	37. 20							
15. 20	50. 20							
15. 26	34. 10							
15. 33	51. 0							
15. 40	39. 10							
15. 42	49. 0							
15. 46	30. 10							
15. 52	52. 20							
15. 56	21. 45. 10							
16. 5	22. 1. 50							
16. 15	21. 16. 10							
16. 20	37. 0							
16. 40	12. 10							
16. 45	32. 5							
16. 55	38. 0							
17. 5	12. 10							
17. 9	16. 0							
17. 11	3. 0							
17. 15	16. 30							
17. 26	18. 5							
17. 37	3. 40							
17. 39	6. 0							
17. 40	9. 0							
17. 45	6. 10							
17. 52	7. 30							
17. 56	2. 45							
18. 2	8. 0							
18. 5	7. 20							
18. 9	23. 30							
18. 12	15. 0							
18. 16	18. 10							
18. 18	12. 10							
18. 22	19. 0							
18. 27	13. 0							
	***							
18. 40	14. 30							
18. 42	7. 0							
18. 44	19. 15							
18. 50	12. 10							
18. 53	16. 30							
18. 55	5. 30							
19. 6	55. 40							
19. 15	35. 0							
19. 24	33. 30							
19. 30	26. 30							
19. 36	52. 20							
19. 49	49. 0							
19. 57	35. 10							
19. 59	44. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 28								
h m	° ′ ″	h m		h m		h m	°	°
20. 2	21. 50. 30							
20. 10	37. 30							
20. 17	31. 30							
20. 28	37. 20							
20. 32	35. 20							
20. 38	37. 10							
20. 45	34. 30							
20. 52	36. 0							
21. 15	4. 10							
21. 25	37. 40							
21. 39	12. 20							
21. 40	36. 30							
21. 52	21. 10							
21. 56	33. 30							
22. 18	7. 20							
22. 22	36. 0							
22. 25	30. 10							
-	***							
23. 0	32. 10							
	***							
23. 42	37. 20							
23. 50	33. 20							
23. 52	40. 0							
23. 59	34. 10							
Aug. 29		Aug. 29		Aug. 29		Aug. 29		
0. 0	21. 34. 10	0. 0	·0845	0. 0	·02143	1. 0	68 ·0	68 ·2
			***		***			
0. 4	39. 20					3. 0	69 ·5	70 ·0
0. 8	37. 0	0. 34	·0869	2. 30	·01989	9. 0	67 ·5	69 ·0
	***		***	2. 51	·02061	21. 0	60 ·0	61 ·0
					***			
0. 22	37. 10	1. 32	·0832					
0. 26	38. 0	1. 56	·0859	5. 10	·01556			
0. 30	33. 10		***		***			
0. 36	38. 20	2. 28	·0850	5. 26	·01580			
0. 43	32. 10	2. 42	·0842		***			
0. 45	36. 45	3. 13	·0933	5. 51	·01384			
0. 55	38. 10		***		***			
1. 0	34. 0	3. 39	·0935	7. 22	·01352			
	***	3. 44	·0920	7. 30	·01390			
1. 18	35. 10	3. 50	·0958	7. 46	·01356			
1. 23	37. 10	4. 9	·0809	12. 28	·01464			
	***	4. 19	·0845	14. 58	·01654			
1. 47	31. 40		***	19. 20	·02229			
	***	5. 19	·0835	23. 59	·01882			
2. 15	36. 10	5. 30	·0895					
2. 25	32. 10	5. 43	·0872					
2. 37	33. 0	5. 52	·0836					
2. 39	27. 10	6. 14	·0836					
2. 42	34. 50	6. 32	·0856					
2. 57	25. 0	6. 49	·0849					
3. 24	18. 30	6. 57	·0837					
3. 36	23. 10	7. 16	·0835					
3. 37	19. 15	7. 27	·0864					
3. 42	24. 10	7. 44	·0836					
3. 50	10. 20	8. 0	·0835					
4. 4	26. 0	8. 13	·0844					
4. 10	16. 5		***					
	***	12. 40	·0857					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁏ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Aug.29		Aug.29						
h m	° ′ ″	h m		h m		h m		°
4. 42	21. 24. 0	12. 58	·0854					
4. 50	19. 0	13. 21	·0860					
4. 56	22. 5	14. 9	·0849					
5. 7	18. 20	14. 30	·0850					
5. 13	21. 10	15. 10	·0861					
5. 28	7. 10	15. 15	·0857					
5. 32	12. 30	15. 40	·0863					
	***	16. 8	·0855					
5. 50	24. 20	16. 30	·0862					
	***	17. 3	·0852					
6. 23	20. 0		***					
	***	18. 27	·0865					
6. 50	24. 10		***					
	***							
		19. 39	·0832					
7. 20	16. 30	19. 45	·0846					
7. 43	26. 20		***					
8. 15	21. 20	21. 56	·0844					
8. 30	24. 10		***					
	***	23. 26	·0850					
9. 12	23. 20	23. 43	·0863					
	***	23. 59	·0861					
9. 54	24. 0							
10. 27	23. 0							
	***							
13. 15	24. 10							
	***							
14. 26	28. 0							
	***							
15. 37	23. 20							
16. 7	27. 10							
	***							
18. 26	16. 30							
	***							
19. 20	17. 20							
	***							
19. 46	12. 0							
	***							
20. 0	15. 10							
	***							
23. 25	26. 0							
23. 45	29. 30							
23. 59	28. 20							
Aug.30		Aug.30		Aug.30		Aug.30		
0. 0	21. 28. 20	0. 0	·0861	0. 0	·01882	1. 0	63 ·0	63 ·5
	***	0. 13	·0859	9. 18	·01349	3. 0	64 ·0	65 ·0
0. 45	32. 5	0. 52	·0879	18. 47	·01963	9. 0	64 ·0	65 ·5
	***	1. 2	·0875		·01922	21. 0	58 ·0	59 ·0
2. 7	32. 10	1. 44	·0884	23. 15	·01730			
5. 20	20. 25	2. 13	·0880	23. 59	·01481			
	***	2. 39	·0886					
9. 20	22. 25		***					
	***	5. 56	·0873					
10. 6	20. 30	7. 45	·0880					
	***	8. 14	·0887					
11. 33	25. 20	8. 33	·0885					
	***	9. 26	·0894					
12. 15	23. 0	9. 45	·0890					
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Aug.30		Aug.30						
h m	° ′ ″	h m		h m		h m	°	°
12. 52	21. 27. 50	10. 10	·0895					
	***	10. 30	·0888					
13. 45	24. 20	10. 55	·0886					
14. 45	26. 0	11. 43	·0893					
	***	12. 22	·0889					
17. 28	14. 30	12. 45	·0883					
	***	13. 13	·0890					
18. 13	19. 5	13. 39	·0884					
	***	14. 14	·0893					
19. 3	15. 0	15. 22	·0885					
	***	16. 32	·0891					
20. 26	17. 10		***					
	***	18. 32	·0874					
21. 37	20. 30	19. 10	·0875					
	***	21. 45	·0854					
23. 45	31. 0		***					
23. 59	46. 10	23. 32	·0857					
		23. 59	·0866					
Aug.31		Aug.31		Aug.31		Aug.31		
0. 0	21. 46. 10	0. 0	·0867	0. 0	·01481	1. 0	59 ·6	60 ·5
0. 38	34. 25	0. 18	·0880	1. 4	·01457	3. 0	61 ·0	62 ·0
0. 54	33. 30	0. 55	·0869	5. 15	·00950	9. 0	62 ·0	63 ·0
	***		***	7. 3	·01110	21. 0	58 ·0	58 ·8
1. 43	35. 20	3. 39	·0885	12. 4	·01229			
3. 57	34. 45	3. 58	·0895	16. 40	·01363			
5. 20	23. 0	4. 36	·0885	17. 10	·01144			
6. 20	21. 35	5. 15	·0881	17. 30	·00301			
7. 6	18. 40	5. 50	·0885	17. 33	·00600			
7. 59	19. 0	6. 15	·0896	17. 37	·00358			
8. 50	23. 0	6. 30	·0892	17. 39	·00480			
9. 22	9. 30	7. 13	·0895	17. 45	·04158			
9. 58	19. 50	7. 18	·0900	17. 56	·02297			
10. 13	18. 20	8. 0	·0893	18. 6	·04037			
10. 40	22. 30	8. 21	·0896	18. 8	·02308			
	***	8. 46	·0908	18. 15	·04260			
11. 42	19. 25	9. 13	·0899	18. 17	·03180			
11. 48	21. 30	9. 20	·0909	18. 20	·04261			
	***	9. 37	·0903	18. 30	·02722			
12. 42	19. 10	9. 44	·0906	18. 33	·03443			
13. 27	23. 30	10. 0	·0891	18. 36	·02907			
13. 57	17. 45	10. 15	·0896	18. 41	·04139			
14. 10	23. 40		***	18. 50	·03990			
	***	12. 45	·0883	18. 57	·04002			
15. 20	9. 30	13. 40	·0900	19. 6	·02228			
15. 32	12. 0	13. 51	·0897	19. 15	·02817			
	***	14. 4	·0906		***			
16. 0	21. 10. 5	14. 21	·0887	20. 15	·02031			
16. 17	22. 5. 20	14. 36	·0885		***			
	(†)	14. 52	·0887	20. 33	·02166			
16. 36	22. 5. 20	15. 14	·0900		***			
16. 39	21. 59. 50	15. 21	·0895	21. 37	·02097			
16. 45	22. 3. 10	15. 43	·0894		***			
	(†)	15. 53	·0930	22. 4	·02130			
19. 45	20. 57. 45	15. 59	·0883		***			
19. 50	53. 10	16. 6	·0921	22. 25	·02007			
19. 58	56. 5		(†)	23. 20	·01730			
20. 4	38. 15	18. 47	·0889	23. 59	·01719			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Aug. 31	
h m	° ′ ″
20. 6	20. 52. 50
20. 12	20. 31. 10
20. 14	21. 7. 10
20. 16	20. 55. 10
20. 18	21. 22. 20
20. 24	20. 56. 25
20. 27	21. 24. 10
20. 30	9. 5
20. 36	24. 10
20. 38	10. 0
20. 43	22. 0
20. 46	9. 30
20. 50	20. 20
21. 3	12. 0
21. 7	25. 10
21. 26	7. 20
21. 30	18. 20
21. 36	4. 0
21. 38	14. 30
21. 40	1. 30
21. 50	8. 30
	***
22. 10	26. 10
22. 17	21. 20
22. 22	26. 5
22. 26	17. 50
22. 32	23. 30
22. 34	11. 30
22. 40	21. 10
22. 42	10. 0
23. 0	48. 40
23. 17	31. 30
	***
23. 53	34. 45
23. 59	33. 40
Sept. 1	
0. 0	21. 33. 35
0. 17	32. 10
1. 40	33. 30
1. 56	42. 35
2. 30	31. 20
3. 8	27. 10
	***
5. 36	21. 20
7. 25	21. 20
8. 20	15. 0
8. 45	16. 30
9. 10	15. 10
	***
10. 15	21. 10
	***
13. 7	24. 10
13. 40	22. 20
14. 10	25. 35
15. 33	21. 10
Sept. 1	
h m	° ′ ″
18. 7	21. 19. 35
18. 53	16. 30
19. 40	15. 25
20. 0	12. 30
20. 50	20. 5
22. 25	25. 25
23. 30	32. 10
23. 40	30. 30
23. 42	35. 40
23. 50	22. 10
23. 54	8. 45
23. 56	22. 45
23. 59	18. 10
Sept. 2	
0. 0	21. 18. 0
0. 4	11. 10
0. 7	21. 20
0. 12	11. 10
0. 16	4. 10
0. 20	19. 20
0. 26	11. 10
0. 35	38. 0
0. 53	15. 10
0. 55	49. 0
1. 0	45. 10
1. 4	53. 10
1. 13	11. 5
1. 18	52. 15
1. 22	26. 20
1. 30	40. 15
1. 40	21. 10
1. 45	51. 5
1. 52	38. 10
1. 54	58. 50
2. 3	26. 15
2. 7	53. 10
2. 13	11. 15
2. 17	37. 0
2. 26	33. 30
2. 30	51. 40
2. 43	13. 10
3. 0	35. 40
3. 5	16. 20
3. 13	44. 0
3. 20	37. 10
3. 24	25. 0
3 40	51. 25
3. 50	35. 0
3. 43	40. 25
3. 45	32. 30
3. 57	23. 10
4. 3	31. 0
4. 10	23. 10
4. 15	30. 5
4. 20	24. 30
4. 32	33. 0
4. 34	26. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Aug. 31	
h m	
19. 0	·0782
19. 4	·0847
19. 7	·082[illegible]
19. 9	·0926
19. 17	·0803
19. 30	·1027
19. 37	·1008
19. 45	·1020
20. 0	·0834
20. 5	·0868
20. 10	·0763
20. 15	·0940
20. 21	·0894
20. 27	·0899
20. 32	·0849
20. 41	·0841
20. 50	·0938
20. 53	·0843
20. 59	·0817
21. 3	·0890
21. 8	·0833
21. 12	·0889
21. 15	·0794
21. 17	·0828
21. 19	·0787
21. 29	·0891
21. 35	·0844
21. 44	·0947
21. 47	·0909
21. 53	·0938
22. 15	·0777
22. 22	·0868
22. 29	·0799
22. 40	·0834
22. 43	·0814
23. 10	·0888
23. 59	·0885
Sept. 1	
0. 0	·0885
0. 19	·0877
	***
1. 26	·0882
1. 57	·0906
2. 11	·0898
	***
2. 51	·0887
3. 7	·0890
3. 19	·0886
3. 51	·0891
4. 28	·0885
4. 31	·0885
5. 10	·0894
6. 38	·0891
7. 52	·0899
8. 13	·0897
8. 30	·0902
9. 21	·0900
Sept. 1	
h m	
9. 42	·0895
10. 42	·0891
12. 51	·0899
13. 0	·0905
13. 51	·0899
14. 22	·0904
17. 14	·0903
20. 55	·0873
22. 40	·0869
23. 57	·0878
23. 59	·0930
Sept. 2	
0. 0	·0940
	(†)
1. 33	·1069
1. 39	·0817
1. 45	·0900
1. 49	·0822
1. 59	·1065
2. 10	·0926
2. 19	·1000
2. 27	·0778
2. 31	·1095
2. 43	·0997
2. 52	·1120
3. 3	·1013
3. 11	·1059
3. 23	·1003
3. 37	·1078
3. 42	·1024
3. 45	·1050
	***
4. 14	·0991
	***
4. 50	·0948
	***
5. 43	·0930
	***
6. 30	·0964
6. 50	·0904
6. 56	·0919
7. 33	·0885
7. 40	·0903
8. 2	·0881
8. 12	·0895
8. 40	·0850
9. 7	·0928
	***
9. 25	·0937
9. 51	·0883
9. 58	·0891
10. 5	·0882
10. 11	·0889
10. 20	·0866
10. 36	·0887

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Sept. 1	
h m	
0. 0	·01719
8. 33;	·01051
21. 0	·01658
23. 30	·01563
23. 43	·01438
23. 56	·02043
23. 59	·01990
Sept. 2	
h m	
0. 0	·01978
	***
1. 3	·01972
1. 10	·02039
1. 22	·02556
1. 26	·02240
1. 36	·01963
1. 39	·02300
1. 50	·02044
1. 53	·02437
	***
2. 17	·02197
	***
2. 48	·02769
3. 13	·02203
3. 30	·02400
	***
4. 51	·02066
5. 47	·01988
6. 3	·02142
	***
6. 48	·01839
8. 37	·01602
9. 5	·01670
10. 26	·01337
10. 47	·01200
11. 17	·01329
11. 32	·01063
11. 38	·01165
11. 45	·01080
12. 25	·01237
12. 37	·01293
12. 56	·01142
13. 28	·01284
13. 43	·01200
14. 6	·01273
14. 40	·01290
14. 57	·01221
	***
15. 37	·01230
15. 50	·01320
16. 6	·01281
18. 48	·01556
	***

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
Sept. 1		
h m	°	°
1. 0	61·0	62·0
3. 0	63·0	64·0
9. 0	64·0	65·0
21. 0	59·0	60·2
Sept. 2		
h m	°	°
1. 0	62·0	63·0
3. 0	64·0	64·8
9. 0	65·5	67·0
21. 0	64·0	66·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 2		Sept. 2		Sept. 2				
h m	° ′ ″	h m		h m		h m		
4. 37	21. 31. 45	10. 51	·0827	23. 59	·01739			
4. 40	26. 20	11. 14	·0863					
4. 52	36. 10	11. 29	·0802					
4. 56	28. 20	11. 41	·0840					
5. 10	34. 0		***					
5. 22	30. 40	11. 54	·0812					
5. 32	34. 20	12. 19	·0837					
5. 40	31. 30	12. 43	·0945					
5. 50	40. 0	12. 54	·0816					
6. 0	7. 30	13. 11	·0867					
6. 15	0. 30	13. 15	·0857					
6. 24	8. 10	13. 30	·0880					
6. 42	23. 35	13. 47	·0834					
6. 50	18. 0	14. 7	·0856					
7. 0	24. 10	14. 26	·0854					
7. 9	21. 30	14. 48	·0884					
7. 15	24. 0		***					
7. 27	19. 30	15. 44	·0817					
	***	15. 54	·0853					
7. 53	24. 10	16. 13	·0816					
8. 4	21. 10		***					
8. 16	21. 26. 5	16. 48	·0841					
8. 51	20. 53. 0		***					
9. 15	21. 17. 10	18. 25	·0848					
9. 40	32. 0		***					
9. 50	25. 30	21. 35	·0812					
10. 12	30. 30		***					
10. 25	24. 30	23. 12	·0833					
10. 40	32. 0		***					
11. 4	6. 25	23. 43	·0860					
11. 26	41. 30	23. 46	·0836					
11. 36	30. 10	23. 53	·0886					
11. 43	42. 20	23. 59	·0889					
12. 30	20. 30							
12. 34	39. 0							
12. 53	15. 10							
13. 6	20. 0							
13. 10	15. 30							
13. 20	24. 10							
13. 26	28. 0							
13. 50	8. 30							
	***							
14. 15	5. 30							
14. 28	20. 10							
	***							
14. 47	15. 0							
	***							
15. 28	18. 20							
15. 43	9. 0							
15. 52	27. 20							
15. 56	23. 10							
16. 15	26. 10							
16. 22	23. 20							
16. 26	26. 30							
	***							
17. 25	20. 15							
17. 38	25. 35							
17. 52	21. 20							
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 2								
h m	° ′ ″	h m		h m		h m		
21. 15	21. 15. 30							
	***							
21. 30	17. 0							
	***							
23. 20	29. 0							
23. 30	33. 10							
23. 34	30. 0							
23. 40	33. 45							
23. 45	23. 35							
23. 52	30. 0							
23. 59	39. 50							
Sept. 3		Sept. 3		Sept. 3		Sept. 3		
0. 0	21. 39. 50	0. 0	·0889	0. 0	·01739	1. 0	64·8	67·0
0. 7	32. 10	0. 15	·0850		***	3. 0	66·0	67·0
0. 12	27. 20	0. 19	·0936	3. 30	·01620	9. 0	66·2	67·0
0. 20	42. 10	0. 26	·0912		***	21. 45	59·8	61·0
0. 22	36. 45	0. 31	·0940	4. 13	·01782			
0. 30	43. 0	0. 43	·0873		***			
0. 36	31. 0	0. 49	·0899	4. 40	·01946			
	***	1. 0	·0870		***			
0. 53	36. 0	1. 12	·0944	5. 32	·01683			
1. 0	31. 10	1. 19	·0907	5. 45	·01749			
1. 8	46. 0	1. 22	·0912	6. 4	·01936			
1. 20	40. 0	1. 27	·0885	6. 15	·01662			
1. 24	45. 50	1. 44	·0901	6. 36	·01442			
1. 26	38. 10	1. 48	·0870	6. 58	·01300			
1. 30	41. 55		***	7. 10	·01302			
1. 40	35. 5	2. 10	·0910	7. 26	·01405			
1. 43	41. 40	2. 25	·0866	7. 37	·01350			
1. 46	34. 10		***	8. 4	·01347			
1. 58	38. 0	2. 30	·0906	8. 15	·01425			
2. 10	43. 50	2. 40	·0888	8. 30	·01340			
2. 24	37. 0	2. 45	·0940		***			
2. 30	43. 0	2. 51	·0927	10. 37	·01332			
2. 38	37. 10	3. 4	·0969		***			
3. 3	58. 45	3. 15	·0837	12. 36	·00900			
3. 12	38. 10	3. 20	·0904		***			
3. 15	46. 0	3. 23	·0851	13. 56	·01284			
3. 27	35. 40	4. 10	·1011	15. 0	·01515			
3. 32	44. 5	4. 15	·0968	15. 7	·01510			
3. 41	39. 30	4. 45	·1064	19. 38	·01923			
3. 52	46. 45	4. 50	·1022	23. 59	·01809			
4. 10	40. 0	4. 54	·1062					
4. 20	45. 0	4. 57	·1035					
	***	5. 9	·1075					
4. 42	29. 10	5. 37	·0940					
4. 52	41. 50	5. 58	·1014					
4. 56	33. 10	6. 9	·0934					
4. 59	37. 5	6. 13	·0969					
5. 5	33. 30	6. 27	·0887					
5. 7	41. 20	6. 31	·0930					
5. 20	27. 10	6. 43	·0864					
5. 32	37. 0	6. 48	·0884					
5. 45	23. 10	6. 54	·0844					
5. 50	28. 20	7. 2	·0885					
5. 53	21. 10	7. 10	·0866					
5. 55	27. 40		***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 3		Sept. 3						
h m	° ′ ″	h m		h m		h m	°	°
6. 2	21. 6. 30	7. 54	·0854					
6. 9	21. 23. 20	8. 5	·0835					
6. 12	20. 50. 5	8. 15	·0855					
6. 20	21. 19. 30	8. 27	·0836					
6. 30	11. 45	8. 45	·0864					
6. 37	25. 0		***					
6. 45	16. 30	9. 36	·0845					
6. 53	28. 15	9. 54	·0857					
7. 0	22. 20	10. 14	·0849					
7. 12	19. 30	10. 44	·0841					
7. 30	0. 30	11. 0	·0869					
7. 58	28. 30	11. 16	·0877					
8. 15	11. 30	11. 28	·0855					
8. 26	22. 55	11. 51	·0888					
8. 45	14. 30	12. 11	·0816					
8. 50	28. 0	12. 21	·0837					
9. 4	20. 0	12. 39	·0811					
9. 15	24. 50	13. 9	·0813					
9. 26	21. 0	13. 22	·0831					
	***	13. 45	·0850					
10. 15	21. 45	14. 0	·0830					
10. 26	18. 30	14. 39	·0846					
10. 36	10. 25		***					
11. 2	33. 20	15. 15	·0822					
11. 40	18. 20		***					
11. 50	36. 0	15. 51	·0844					
11. 53	23. 20		***					
11. 56	30. 0	17. 15	·0826					
12. 5	18. 10		***					
12. 20	32. 25	17. 41	·0845					
12. 45	19. 30		***					
12. 50	23. 0	19. 4	·0837					
13. 8	15. 10	19. 21	·0861					
13. 22	18. 15	19. 40	·0848					
13. 42	17. 0		***					
13. 50	21. 5	20. 36	·0856					
	***		***					
14. 30	16. 30	22. 22	·0823					
	***		***					
15. 7	21. 25	23. 28	·0808					
15. 20	18. 10		***					
15. 37	23. 5	23 50	·0832					
	***	23. 59	·0830					
16. 7	25. 0							
	***							
17. 6	19. 0							
	***							
17. 52	24. 0							
	***							
18. 20	21. 50							
	***							
18. 57	29. 5							
19. 6	23. 10							
19. 17	35. 5							
19. 22	21. 20							
	***							
19. 43	18. 45							
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 3								
h m	° ′ ″	h m		h m		h m	°	°
20. 20	21. 17. 0							
20. 45	17. 0							
20. 52	21. 25							
21. 6	13. 0							
21. 12	22. 10							
21. 28	17. 20							
21. 40	24. 0							
21. 50	17. 10							
21. 54	25. 30							
	***							
22. 26	25. 0							
	***							
23. 59	33. 0							
Sept. 4		Sept. 4		Sept. 4		Sept. 4		
0. 0	21. 33. 0	0. 0	·0830	0. 0	·01809	7. 15	65·5	66·7
	***	0. 32	·0835		***	21. 0	60·0	61·3
0. 20	30. 30	0. 50	·0873	2. 4	·01763			
0. 54	38. 0	1. 11	·0870	2. 36	·01846			
1. 8	36. 10	1. 21	·0895	3. 37	·01682			
1. 20	41. 45	1. 37	·0866	3. 56	·01701			
1. 33	37. 30	1. 46	·0884		***			
1. 40	40. 0	1. 52	·0872	5. 51	·01423			
1. 57	35. 10	2. 15	·0936	9. 57	·01112			
2. 5	38. 50	2. 20	·0846	12. 4	·01169			
2. 15	34. 30	2. 28	·0869	12. 32	·01103			
2. 37	22. 30	2. 37	·0885	13. 10	·01105			
	***	2. 45	·0861	13. 36	·01179			
3. 30	30. 20	2. 58	·0855	14. 4	·01102			
	***	3. 10	·0870	15. 6	·01282			
3. 42	23. 10	3. 22	·0845	21. 53	·01732			
	***	3. 43	·0867		***			
4. 15	30. 15	3. 52	·0912	23. 59	·01739			
4. 26	24. 0	4. 0	·0902					
4. 42	27. 35	4. 11	·0905					
	***	4. 22	·0880					
5. 34	22. 30	4. 28	·0896					
	***	4. 33	·0880					
9. 10	25. 30	4. 41	·0896					
9. 24	30. 0	4. 55	·0870					
9. 37	26. 30	5. 13	·0866					
9. 43	29. 50	5. 19	·0837					
9. 58	20. 30	5. 46	·0864					
10. 5	22. 10	5. 55	·0857					
10. 17	17. 30		***					
10. 20	19. 0	6. 50	·0857					
	***	7. 13	·0877					
10. 54	12. 10		***					
11. 13	17. 10	8. 22	·0870					
11. 22	15. 0	8. 54	·0897					
	***	9. 28	·0876					
11. 41	15. 30	9. 38	·0882					
12. 4	30. 30	9. 45	·0869					
13. 9	13. 25	9. 52	·0876					
13. 45	30. 0	10. 7	·0865					
	***	10. 14	·0872					
14. 42	16. 35		***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 4		Sept. 4						
h m	° ′ ″	h m		h m		h		
15. 32	21. 21. 30	10. 45	·0847					
	***	11. 0	·0852					
16. 10	16. 45	11. 13	·0863					
16. 15	18. 30	11. 40	·0853					
16. 38	12. 30	12. 11	·0865					
16. 57	17. 0	12. 27	·0861					
	***	12. 45	·0867					
17. 33	9. 10	12. 55	·0877					
17. 40	17. 0	13. 13	·0867					
17. 46	9. 10	13. 29	·0870					
	***	13. 54	·0827					
18. 5	16. 45	14. 21	·0860					
18. 10	11. 0	14. 30	·0856					
18. 13	21. 30	14. 47	·0867					
18. 22	14. 45		***					
18. 28	19. 0	16. 25	·0871					
18. 40	15. 30	16. 45	·0883					
18. 52	18. 45		***					
	***	19. 32	·0883					
19. 18	13. 10		***					
19. 23	3. 30	20. 56	·0867					
19. 28	13. 5		***					
20. 0	17. 0	21. 45	·0878					
20. 7	12. 10	21. 55	·0862					
20. 15	18. 5	22. 13	·0866					
	***	22. 43	·0806					
22. 24	27. 0	22. 48	·0809					
22. 40	24. 30	22. 51	·0803					
22. 46	30. 0	23. 0	·0817					
22. 56	27. 25	23. 12	·0790					
23. 15	37. 10	23. 39	·0826					
23. 30	29. 30	23. 55	·0813					
23. 45	31. 30	23. 59	·0820					
23. 59	30. 15							
Sept. 5		Sept. 5		Sept. 5		Sept. 5		
0. 0	21. 30. 15	0. 0	·0822	0. 0	·01739	1. 0	64·0	65·0
0. 13	34. 25	0. 15	·0849	2. 0	·01690	3. 0	66·0	68·0
	***	0. 37	·0837	3. 4	·01369	9. 10	67·0	68·0
0. 40	31. 0	0. 49	·0849	4. 30	·01296	21. 0	63·0	64·0
0. 43	32. 10	0. 54	·0838	5. 33	·01329			
0. 56	31. 15	1. 27	·0856	7. 13	·01300			
1. 24	33. 50	1. 40	·0828	8. 46	·01348			
1. 44	28. 30	2. 0	·0849	9. 13	·01250			
1. 58	33. 10	2. 12	·0842	10. 10	·01252			
2. 2	30. 0	2. 25	·0843	19. 27	·01813			
2. 18	30. 15	2. 40	·0877	23. 59	·01922			
2. 24	27. 10	3. 0	·0847					
2. 40	35. 30	3. 14	·0863					
2. 58	33. 0	3. 17	·0855					
3. 8	37. 0	3. 43	·0869					
3. 15	35. 10	3. 52	·0876					
3. 26	37. 45	3. 57	·0867					
3. 30	35. 5	4. 0	·0869					
3. 36	37. 10	4. 14	·0856					
	***	4. 26	·0868					
4. 10	28. 30	4. 51	·0832					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 5		Sept. 5						
h m	° ′ ″	h m						
4. 20	21. 32. 20	5. 0	·0838					
4. 38	27. 0	5. 9	·0827					
5. 15	13. 20	5. 35	·0862					
5. 37	16. 30	5. 54	·0847					
	***		***					
6. 7	17. 20	6. 43	·0861					
6. 50	26. 30	7. 10	·0846					
	***	7. 58	·0858					
7. 42	22. 20	8. 21	·0854					
8. 6	24. 0	8. 45	·0724					
	***	9. 11	·0850					
8. 45	15. 30	9. 22	·0869					
9. 4	34. 0	9. 30	·0725					
9. 30	6 10	9. 45	·0860					
9. 40	29. 0	9. 57	·0875					
9. 57	17. 45	10. 11	·0861					
10. 6	23. 0	10. 37	·0868					
10. 20	19. 0	11. 14	·0855					
10. 28	21. 10	12. 18	·0869					
10. 40	19. 30	12. 54	·0859					
11. 3	22. 5	13. 45	·0871					
11. 30	19. 30	14. 26	·0804					
12. 20	18. 25	14. 45	·0872					
12. 29	20. 30	14. 58	·0865					
12. 36	18. 45	15. 13	·0869					
	***	15. 37	·0866					
13. 15	25. 30	16. 56	·0894					
13. 40	23. 30	18. 10	·0885					
13. 54	25. 25	19. 11	·0855					
14. 26	21. 20	19. 24	·0857					
14. 40	24. 0	21. 17	·0806					
15. 0	20. 45	21. 35	·0819					
15. 38	26. 30	21. 55	·0798					
16. 30	20. 40	22. 26	·0814					
	***	22. 33	·0804					
17. 8	23. 30	22. 43	·0815					
	***	23. 0	·0806					
19. 4	21. 40	23. 8	·0820					
19. 13	24. 0	23. 12	·0813					
19. 20	23. 5	23. 24	·0820					
19. 28	23. 5	23. 59	·0816					
19. 42	23. 10							
19. 57	23. 30							
20. 2	26. 0							
	***							
20. 37	23. 30							
20. 40	20. 20							
20. 45	24. 0							
	***							
21. 22	20. 20							
	***							
21. 42	29. 15							
22. 0	23. 30							
22. 17	31. 20							
22. 27	33. 10							
22. 33	35. 45							
22. 40	30. 10							
	***							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 5								
h m	° ′ ″	h m		h m		h m	°	°
23. 6	21. 38. 20							
	***							
23. 59	33. 40							
Sept. 6		Sept. 6		Sept. 6		Sept. 6		
0. 0	21. 33. 35	0. 0	·0817	0. 0	·01922	1. 0	65·0	66·0
0. 10	31. 0	0. 21	·0839	5. 47	·01847	3. 0	66·0	67·0
0. 26	34. 30	0. 28	·0836	9. 37;	·01649	9. 0	66·0	66·8
0. 40	33. 25	0. 59	·0870	17. 7	·02141	21. 0	59·0	60·5
1. 6	37. 50	1. 15	·0865	21. 57	·01813			
	***	1. 30	·0853	23. 59	·01740			
2. 4	30. 10	1. 48	·0876					
	***	2. 9	·0875					
3. 25	35. 30	2. 17	·0881					
3. 32	33. 35	2. 43	·0868					
3. 50	34. 0	3. 7	·0900					
4. 0	32. 10	3. 13	·0897					
4. 23	32. 10	3. 18	·0901					
	***	3. 37	·0889					
5. 34	22. 50	3. 45	·0897					
5. 50	23. 30	4. 0	·0884					
6. 20	14. 0	4. 18	·0892					
6. 37	19. 30	4. 30	·0885					
6. 52	17. 20	4. 43	·0890					
7. 17	22. 20	4. 50	·0886					
	***	5. 5	·0893					
8. 4	23. 30	5. 16	·0889					
8. 15	17. 10	5. 39	·0897					
8. 33	18. 50	5. 45	·0926					
8. 50	15. 30	6. 10	·0890					
	***	6. 20	·0906					
9. 26	21. 35	6. 31	·0895					
	***	6. 52	·0899					
10. 4	22. 20	7. 15	·0888					
	***	8. 2	·0883					
10. 42	21. 20	8. 20	·0895					
11. 6	24. 30	8. 42	·0873					
11. 25	21. 20	9. 7	·0888					
11. 48	24. 10	10. 8	·0873					
12. 13	23. 20	10. 42	·0877					
12. 34	19. 30	10. 52	·0889					
13. 6	18. 30	11. 7	·0879					
	***	12. 18	·0886					
16. 20	21. 20	12. 40	·0893					
	***	13. 15	·0885					
17. 7	19. 35	17. 7	·0892					
	***		***					
18. 2	20. 25	23. 0	·0851					
	***	23. 40	·0864					
19. 56	16. 10	23. 59	·0861					
	***							
21. 40	20. 30							
	***							
23. 59	29. 30							
Sept. 7		Sept. 7		Sept. 7		Sept. 7		
0. 0	21. 29. 30	0. 0	·0861	0. 0	·01740	1. 0	63·0	64·0
0. 15	30. 40	0. 15	·0868	1. 47	·01609	3. 0	64·8	66·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 7		Sept. 7		Sept. 7		Sept. 7		
h m	° ′ ″	h m				h m	°	°
0. 40	21. 30. 0	0. 52	·0865	6. 40	·01030	9. 0	65·8	66·8
1. 52	29. 30	1. 42	·0875	7. 33	⎰ ·01079	21. 0	62·3	63·5
	***		***		⎱ ·01267			
4. 22	25. 0	3. 29	·0875	13. 36	·01349			
	***	3. 45	·0882	21. 3	·01688			
7. 23	23. 5	4. 52	·0881	23. 59	·01600			
8. 40	23. 30	5. 55	·0892					
8. 58	20. 45	6. 21	·0886					
9. 7	22. 30	6. 51	·0883					
10. 2	15. 25	7. 14	·0891					
10. 29	18. 30	8. 12	·0888					
	***	8. 28	·0895					
11. 26	17. 50	9. 23	·0885					
11. 44	19. 45	9. 36	·0890					
12. 33	19. 20	9. 43	·0888					
12. 53	17. 0	10. 5	·0896					
13. 25	16. 20	10. 26	·0884					
13. 34	15. 10	10. 41	·0891					
13. 53	16. 5	11. 7	·0882					
14. 20	16. 0	13. 13	·0888					
15. 15	18. 30	14. 0	·0884					
15. 25	17. 45	15. 12	·0895					
16. 15	20. 10	15. 52	·0891					
16. 26	19. 5	16. 13	·0896					
	***	21. 37	·0867					
19. 37	17. 0	21. 48	·0860					
21. 57	22. 5	22. 6	·0867					
23. 7	29. 30	23. 0	·0863					
23. 59	31. 45	23. 59	·0866					
Sept. 8		Sept. 8		Sept. 8		Sept. 8		
0. 0	21. 31. 45	0. 0	·0866	0. 0	·01600	1. 0	65·8	67·0
0. 35	33. 30	1. 51	·0879	1. 56	·01468	3. 0	68·0	68·5
0. 56	31. 40	2. 22	·0871	5. 10	·01200	9. 0	68·5	69·0
	***	2. 53	·0877	7. 47	·01351	21. 0	67·0	67·8
2. 45	31. 5	3. 21	·0870	10. 22	·01403			
	***	4. 0	·0873	11. 20	·01371			
4. 4	24. 35	4. 40	·0888	15. 50	·01513			
4. 27	25. 30	5. 12	·0879	23. 59	·01668			
	***	5. 40	·0883					
5. 50	17. 30	6. 5	·0897					
6. 20	20. 25	6. 45	·0891					
	***	7. 26	·0897					
9. 15	20. 20	7. 51	·0891					
9. 40	24. 0	9. 5	·0891					
10. 7	17. 20	9. 21	·0901					
10. 26	25. 0	9. 40	·0893					
10. 50	17. 30	9. 45	·0898					
11. 36	16. 0	9. 54	·0895					
12. 47	19. 30	10. 13	·0910					
13. 18	19. 10	10. 37	·0898					
13. 40	20. 15	10. 45	·0906					
14. 27	19. 5	11. 15	·0890					
14. 57	21. 35	11. 40	·0894					
15. 10	21. 20	12. 26	·0886					
15. 27	23. 30	13. 26	·0891					
16. 10	20. 5	14. 27	·0896					
	***	15. 59	·0885					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 8		Sept. 8						
h m	° ′ ″	h m		h m		h m	°	°
18. 50	21. 15. 0	16. 30	·0891					
18. 57	11. 10	18. 52	·0879					
19. 6	13. 5	19. 7	·0881					
19. 18	14. 20	20. 59	·0873					
20. 15	14. 15	21. 43	·0873					
21. 28	19. 35	23. 43	·0881					
23. 6	27. 30	23. 59	·0879					
23. 59	30. 20							
Sept. 9		Sept. 9		Sept. 9		Sept. 9		
0. 0	21. 30. 20	0. 0	·0879	0. 0	.01668	1. 0	68·0	68·5
1. 40	29. 30	1. 43	·0889	3. 6	·01557	3. 0	68·0	69·0
5. 10	22. 10	2. 42	·0883	5. 10	·01320	9. 0	66·5	67·5
8. 33	22. 30	3. 20	·0869	10. 28	·01602	21. 0	58·2	59·6
8. 57	15. 20	4. 52	·0857	18. 52	·02322			
9. 42	23. 50	6. 0	·0869	23. 59	·01988			
10. 3	21. 30	6. 21	·0865					
13. 0	21. 25	8. 2	·0879					
18. 34	19. 5	8. 40	·0875					
19. 35	16. 30	8. 57	·0887					
21. 48	21. 35	9. 6	·0885					
22. 26	24. 30	9. 30	·0891					
22. 43	24. 30	9. 52	·0881					
23. 59	28. 25	14. 45	·0897					
		19. 26	·0890					
		22. 43	·0857					
		23. 45	·0868					
		23. 59	·0872					
Sept. 10		Sept. 10		Sept. 10		Sept. 10		
0. 0	21. 28. 25	0. 0	·0872	0. 0	·01988	1. 0	61·8	61·8
	***	0. 13	·0877	10. 10	·01337	3. 0	62·0	63·0
1. 20	31. 20	0. 42	·0870	20. 7	·01960	9. 0	63·0	64·8
	***	0. 50	·0879	22. 13	·02036	22. 24	57·0	58·0
6. 10	20. 10	1. 15	·0877	23. 59	·01937			
7. 43	21. 5	1. 21	·0881					
8. 20	17. 40	1. 30	·0873					
9. 17	21. 30	1. 52	·0874					
16. 45	22. 10	2. 0	·0881					
	***	2. 11	·0873					
19. 43	16. 30	2. 30	·0872					
23. 59	29. 5	2. 52	·0877					
		3. 21	·0874					
		3. 50	·0877					
		4. 0	·0875					
		4. 20	·0883					
		4. 48	·0880					
		5. 42	·0891					
		6. 0	·0883					
		6. 40	·0894					
		6. 51	·0887					
		7. 12	·0889					
		7. 20	·0895					
		7. 40	·0888					
		16. 28	·0903					
		17. 4	·0908					
		18. 40	·0906					
		21. 11	·0884					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Sept. 10						
h m	° ′ ″	h m		h m		h m	°	°
		21. 29	·0886					
		22. 11	·0875					
		22. 57	·0873					
		23. 59	·0881					
Sept. 11		Sept. 11		Sept. 11		Sept. 11		
0. 0	21. 29. 5	0. 0	·0881	0. 0	·01237	7. 47	65·0	65·0
1. 0	30. 45	2. 22	·0888	8. 10	·01203	21. 0	57·0	58·0
	***	2. 48	·0885	13. 4	·01227			
6. 36	20. 30	3. 12	·0887	22. 2	·01880			
6. 52	21. 40	3. 43	·0895	23. 59	·01871			
7. 20	20. 10	4. 15	·0891					
7. 50	21. 5	4. 36	·0897					
8. 20	15. 30	4. 51	·0896					
8. 50	17. 30	5. 21	·0901					
9. 0	16. 20	5. 45	·0899					
9. 33	20. 30	6. 3	·0893					
	***	7. 22	·0891					
11. 52	20. 25	7. 52	·0895					
12. 10	18. 25	8. 12	·0889					
12. 23	22. 5	8. 26	·0897					
13. 26	14. 30	8. 51	·0889					
	***	9. 16	·0895					
15. 15	20. 20	10. 13	·0895					
	***	10. 26	·0899					
17. 26	19. 0	11. 43	·0899					
18. 7	15. 30	12. 12	·0910					
18. 54	15. 30	13. 11	·0891					
19. 40	21. 25	15. 0	·0895					
	***	15. 14	·0898					
20. 26	21. 10	18. 17	·0900					
	***	19. 12	·0885					
21. 15	24. 0	21. 26	·0877					
21. 37	20. 20	21. 42	·0883					
23. 6	29. 5	22. 57	·0877					
23. 45	28. 30	23. 59	·0880					
23. 59	32. 30							
Sept. 12		Sept. 12		Sept. 12		Sept. 12		
0. 0	21. 32. 30	0. 0	·0881	0. 0	·01871	1. 0	61·0	62·0
	***	1. 0	·0887*	0. 21	·01863	3. 0	64·0	65·0
2. 37	28. 10	3. 0	·0881*	1. 0	·01828*	9. 0	66·0	67·0
4. 15	25. 30		(†)	3. 0	·01535*	21. 0	61·0	62·5
	(†)	7. 44	·0890		(†)			
7. 47	12. 30	7. 57	·0895	7. 47	·01400			
8. 20	15. 30	8. 51	·0886	10. 36	·01369			
9. 3	15. 25	9. 40	·0891	20. 25	·01720			
9. 40	16. 40	9. 51	·0900	23. 3	·01848			
10. 13	9. 30	10. 28	·0881	23. 59	·01857			
11. 3	18. 20	11. 40	·0891					
11. 48	21. 30	15. 55	·0901					
	***	16. 52	·0921					
15. 52	21. 20	18. 22	·0849					
16. 20	26. 30	19. 10	·0899					
	***	19. 15	·0883					
17. 20	19. 20	19. 23	·0902					
17. 40	23. 25	20. 12	·0870					
17. 56	20. 15	20. 26	·0879					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 12		Sept. 12						
h m	° ′ ″	h m		h m		h m	°	°
18. 3	21. 22. 5	20. 52	·0866					
18. 20	22. 5	21. 40	·0873					
18. 42	30. 0	22. 0	·0864					
18. 53	27. 10	22. 14	·0874					
19. 7	30. 5	22. 29	·0867					
19. 36	21. 10		***					
19. 40	26. 10	23. 43	·0861					
19. 50	21. 50	23. 51	·0870					
	***	23. 59	·0865					
20. 20	21. 0							
	***							
20. 54	29. 50							
	***							
22. 6	22. 25							
22. 27	28. 30							
	***							
23. 30	31. 10							
23. 59	33. 35							
Sept. 13		Sept. 13		Sept. 13		Sept. 13		
0. 0	21. 33. 35	0. 0	·0864	0. 0	·01857	1. 0	62·0	63·0
0. 10	33. 0	0. 8	·0859	1. 4	·01872	3. 0	62·7	63·8
0. 25	36. 0	0. 18	·0868	5. 10	·01709	9. 0	60·8	62·0
0. 50	35. 10	0. 28	·0860	5. 43	·01730	21. 0	55·0	57·0
1. 7	36. 30	0. 45	·0861	6. 47	·01669			
2. 4	33. 30	1. 40	·0873	11. 9	·01832			
2. 30	30. 20	1. 45	·0868	14. 13	·02017			
	***		***	16. 40	·02246			
3. 40	32. 25	2. 51	·0869	22. 20	·01918			
4. 0	29. 30	3. 13	·0879	23. 59	·01890			
	***	3. 39	·0881					
4. 26	29. 40	3. 52	·0874					
4. 47	26. 30		***					
5. 7	28. 10	4. 45	·0881					
5. 45	10. 30	5. 10	·0857					
6. 2	20. 0	5. 15	·0859					
6. 22	14. 45	5. 19	·0853					
7. 5	21. 20	5. 44	·0891					
7. 26	18. 30	6. 0	·0871					
7. 45	20. 20	6. 14	·0883					
8. 10	19. 0	6. 40	·0878					
8. 21	20. 40	6. 57	·0887					
8. 50	15. 30	7. 13	·0881					
9. 4	19. 5	7. 21	·0887					
9. 10	17. 45	7. 58	·0882					
9. 20	20. 35	9. 0	·0890					
9. 47	18. 0	9. 28	·0898					
10. 15	21. 0	9. 43	·0895					
	***	9. 58	·0899					
10. 47	17. 30	11. 22	·0893					
	***	12. 13	·0899					
12. 17	22. 5	12. 52	·0897					
13. 2	21. 30	13. 11	·0890					
13. 42	30. 0	13. 40	·0906					
	***	14. 7	·0904					
14. 22	23. 40	14. 36	·0911					
14. 43	23. 0	15. 26	·0892					
14. 54	21. 30	15. 57	·0900					
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 13		Sept. 13						
h m	° ′ ″	h m		h m		h m	°	°
15. 53	21. 24. 10	17. 14	·0904					
16. 15	22. 0	17. 40	·0909					
	***	18. 37	·0877					
17. 17	19. 30	18. 56	·0884					
	***	19. 13	·0883					
18. 15	24. 25	20. 7	·0891					
18. 42	22. 40	21. 32	·0886					
19. 10	25. 45	22. 0	·0888					
19. 40	25. 0	22. 22	·0874					
19. 45	26. 20	23. 15	·0875					
19. 58	25. 25	23. 35	·0885					
20. 3	26. 35	23. 59	·0880					
20. 37	23. 10							
21. 43	25. 0							
22. 8	27. 20							
	***							
22. 47	26. 30							
	***							
23. 18	28. 20							
23. 47	32. 30							
23. 59	31. 50							
Sept. 14		Sept. 14		Sept. 14		Sept. 14		
0. 0	21. 31. 50	0. 0	·0880	0. 0	·01890	1. 0	57·0	58·0
	***	0. 42	·0889	2. 20	{ ·01827	3. 0	58·0	59·6
0. 53	33. 30	1. 5	·0887		·01703	9. 0	59·4	61·0
	***	1. 43	·0899	9. 33	·01349	21. 0	56·0	57·0
1. 47	33. 20	2. 5	·0886	10. 47	·01347			
3. 0	27. 35	2. 30	·0895	11. 54	·01262			
6. 42	20. 35	2. 51	·0903	12. 26	·01217			
7. 23	21. 20	3. 13	·0897	12. 43	·01280			
7. 40	13. 30	4. 0	·0898	20. 28	·01749			
7. 54	15. 30	4. 18	·0903	23. 59	·01742			
8. 20	13. 10	4. 40	·0900					
8. 45	16. 30	5. 16	·0903					
9. 10	19. 0	5. 52	·0895					
9. 43	15. 30	6. 36	·0900					
9. 52	17. 20	7. 5	·0894					
10. 6	16. 0	7. 27	·0897					
10. 20	18. 30	7. 50	·0913					
10. 40	18. 0	8. 6	·0908					
11. 10	5. 45	8. 28	·0915					
11. 30	5. 30	8. 43	·0909					
12. 4	20. 25	8. 54	·0914					
	***	9. 59	·0902					
12. 53	24. 30	10. 12	·0908					
13. 7	21. 20	10. 40	·0900					
13. 32	20. 45	10. 45	·0918					
13. 40	23. 20	11. 14	·0913					
13. 47	23. 0	11. 50	·0872					
14. 10	27. 30	12. 11	·0889					
14. 37	22. 30	12. 36	·0871					
	***	12. 51	·0891					
15. 21	19. 10	13. 1	·0887					
16. 10	18. 20	13. 40	·0901					
17. 8	26. 5	13. 51	·0897					
17. 20	24. 30	15. 29	·0909					
	***	15. 50	·0918					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept.14		Sept.14						
h m	° ′ ″	h m		h m		h m	°	°
18. 16	21. 30. 0	16. 0	·0915					
18. 36	27. 20	16. 26	·0924					
18. 56	28. 10	17. 15	·0897					
19. 33	20. 0	17. 52	·0885					
	***	18. 30	·0904					
20. 21	28. 20	18. 54	·0888					
	***	19. 18	·0877					
20. 50	25. 25		***					
	***	19. 48	·0877					
22. 20	30. 0	20. 3	·0884					
22. 42	34. 30	20. 31	·0880					
22. 50	33. 20	20. 54	·0884					
23. 3	36. 30	22. 15	·0860					
23. 59	35. 30	22. 37	·0867					
		23. 3	·0860					
		23. 59	·0877					
Sept.15		Sept.15		Sept.15		Sept.15		
0. 0	21. 35. 30	0. 0	·0877	0. 0	·01742	1. 0	59·0	60·0
0. 15	36. 30	0. 20	·0876	2. 37	·01643	3. 0	61·2	62·3
1. 25	34. 20	0. 33	·0882	9. 50:	·01196	9. 0	61·7	62·8
2. 26	28. 30	0. 50	·0878	20. 20	·01688	21. 0	57·0	58·0
2. 42	30. 20	1. 12	·0881	21. 25	{ ·01712			
5. 10	21. 20	1. 37	·0873		{ ·01763			
5. 47	21. 30	2. 15	·0888	23. 59	·01754			
6. 36	17. 50	2. 22	·0883					
8. 26	21. 30	2. 36	·0891					
17. 25	18. 35	3. 11	·0875					
	***	3. 39	·0885					
19. 47	15. 30	5. 43	·0896					
21. 6	17. 30	6. 15	·0885					
21. 40	20. 20	6. 33	·0895					
22. 26	21. 30	13. 28	·0905					
23. 50	31. 25	14. 26	·0904					
23. 59	30. 0	17. 23	·0910					
		18. 30	·0907					
		21. 52	·0878					
		22. 40	·0880					
		23. 15	·0873					
		23. 43	·0875					
		23. 59	·0863					
Sept.16		Sept.16		Sept.16		Sept.16		
0. 0	21. 29. 55	0. 0	·0863	0. 0	·01754	1. 0	61·0	62·0
0. 10	28. 30	0. 44	·0873	1. 4	·01726	3. 0	63·5	64·8
0. 52	31. 30	1. 7	·0870	6. 47	·01071	9. 0	64·0	65·3
1. 18	30. 25		***	13. 41	·01182	21. 0	60·0	61·0
	***	2. 39	·0879	19. 57	·01523			
2. 6	32. 10	3. 36	·0895	23. 59	·01566			
	***	4. 30	·0886					
4. 15	29. 20	4. 43	·0895					
4. 40	25. 30	5. 14	·0881					
5. 3	27. 0	5. 30	·0880					
5. 38	22. 35	5. 47	·0871					
6. 0	22. 40	6. 0	·0873					
6. 10	21. 20	6. 11	·0885					
6. 22	24. 10	6. 27	·0877					
6. 58	21. 0	6. 54	·0892					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept.16		Sept.16						
h m	° ′ ″	h m		h m		h m	°	°
7. 10	21. 22. 5	7. 5	·0887					
7. 46	21. 50	7. 33	·0891					
8. 15	16. 30	7. 43	·0901					
8. 36	21. 20	7. 52	·0891					
9. 37	23. 20	8. 16	·0909					
10. 28	29. 45	8. 39	·0895					
11. 4	19. 20	9. 37	·0903					
11. 32	29. 30	10. 9	·0900					
12. 4	24. 10	10. 37	·0906					
12. 27	23. 25	10. 57	·0900					
13. 15	16. 45	11. 15	·0911					
13. 47	20. 20	11. 46	·0898					
14. 6	19. 20	12. 42	·0901					
14. 37	23. 20	13. 17	·0895					
15. 26	18. 25	13. 44	·0898					
15. 50	22. 10	14. 14	·0887					
	***	17. 39	·0904					
17. 28	19. 10	18. 38	·0891					
17. 51	20. 20	19. 0	·0895					
18. 7	19. 30	20. 26	·0877					
18. 29	20. 25	21. 21	·0885					
18. 45	20. 15	22. 45	·0867					
19. 10	22. 30	23. 59	·0870					
19. 50	22. 20							
20. 13	26. 25							
20. 47	24. 5							
21. 3	24. 45							
21. 20	24. 0							
21. 40	25. 10							
22. 6	24. 25							
23. 15	29. 40							
23. 59	30. 45							
Sept.17		Sept.17		Sept.17		Sept.17		
0. 0	21. 30. 45	0. 0	·0870	0. 0	·01566	1. 0	63·0	64·0
1. 7	31. 35	0. 10	·0866	2. 45	·01356	3. 0	64·5	65·8
2. 20	30. 0	0. 39	·0873	4. 54	{ ·01120	9. 0	62·8	64·2
3. 57	24. 5	1. 0	·0870		{ ·01167	22. 40	56·0	57·0
4. 25	20. 30	4. 33	·0871	7. 33	·01300			
6. 47	18. 30	5. 0	·0877	11. 45	·01438			
7. 20	5. 0	6. 39	·0881	12. 6	·01357			
7. 54	18. 30	7. 5	·0875	20. 3	·02185			
8. 15	18. 30	7. 30	·0907	22. 57	{ ·02002			
8. 28	19. 45	8. 0	·0886		{ ·01960			
	***	8. 51	·0883	23. 59	·01952			
9. 37	20. 25	9. 14	·0887					
10. 6	17. 0	9. 44	·0879					
	***	10. 3	·0884					
11. 32	16. 10	11. 7	·0885					
11. 57	35. 0	11. 30	·0881					
12. 32	16. 30	11. 43	·0911					
12. 45	17. 30	12. 13	·0886					
13. 8	14. 25	12. 30	·0896					
14. 7	12. 30	13. 15	·0884					
15. 0	15. 25	14. 19	·0899					
15. 13	14. 30	15. 15	·0903					
15. 27	17. 15	15. 34	·0897					
15. 56	25. 30	15. 44	·0900					
	***							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Sept.17		Sept.17						
h m	° ′ ″	h m		h m		h m	°	°
18. 4	21. 18. 30	15. 57	·0896					
	***	16. 29	·0907					
19. 10	17. 20	17. 12	·0911					
19. 26	14. 30	17. 40	·0902					
19. 36	17. 30	19. 24	·0897					
20. 39	17. 0	19. 36	·0900					
	***	20. 0	·0892					
22. 23	28. 25	20. 40	·0891					
23. 17	25. 0	21. 48	·0863					
23. 59	27. 35	22. 7	·0858					
		22. 18	·0865					
		22. 45	·0865					
		23. 59	·0880					
Sept.18		Sept.18		Sept.18		Sept.18		
0. 0	21. 27. 35	0. 0	·0880	0. 0	·01952	6. 52	62 ·0	63 ·0
0. 30	33. 45	0. 30	·0883	4. 40	·01601	21. 0	59 ·8	61 ·2
1. 10	30. 0	1. 13	·0867	10. 4	·01230			
	***	2. 1	·0880	12. 47	·01271			
3. 24	27. 10	3. 15	·0891	13. 15	·01232			
4. 7	23. 30	4. 5	·0883	19. 53	·01551			
5. 23	22. 25	5. 30	·0891	23. 4	·01466			
6. 24	18. 0	6. 39	·0891		(†)			
6. 37	18. 40	6. 55	·0904					
6. 56	15. 30	7. 36	·0891					
7. 17	21. 30	7. 40	·0887					
7. 50	19. 35	9. 22	·0906					
	***	10. 0	·0898					
8. 34	21. 20	10. 21	·0883					
9. 26	15. 30	10. 43	·0889					
9. 50	19. 35	11. 37	·0895					
10. 0	18. 25	12. 30	·0896					
10. 17	21. 20	13. 0	·0912					
10. 50	17. 5	13. 43	·0908					
	***	14. 13	·0900					
12. 5	19. 30	14. 51	·0899					
12. 57	28. 0	17. 52	·0911					
14. 2	18. 30	19. 45	·0899					
	***	21. 40	·0871					
17. 6	20. 45	22. 24	·0865					
	***	23. 6	·0867					
20. 26	17. 25		(†)					
22. 24	25. 20							
23. 3	26. 35							
	(†)							
Sept.19		Sept.19		Sept.19		Sept.19		
1 0	21. 27. 59*	1. 0	·0867*	1. 0	·01356*	1. 0	63 ·0	64 ·0
3. 0	26. 26*	3. 0	·0879*	3. 0	·01107*	3. 0	65 ·0	66 ·0
9. 0	16. 36*	9. 0	·0887*	9. 0	·01503*	9. 0	64 ·0	65 ·8
21. 0	17. 46*	21. 0	·0887*	21. 0	·00990*	21. 0	56 ·0	57 ·0
Sept.20		Sept.20		Sept.20		Sept.20		
	(†)		(†)		(†)	1. 0	58 ·5	59 ·8
0. 27	21. 30. 20	0. 35	·0883	0. 41	·02291	3. 0	61 ·0	62 ·5
3. 4	27. 45	1. 52	·0891	9. 52:	·01639	9. 0	62 ·7	63 ·5
5. 40	22. 10	2. 28	·0899	18. 45	·01923	21. 0	60 ·0	61 ·0
10. 26	20. 20	3. 30	·0895	23. 59	·01960			
Sept.20		Sept.20						
h m	° ′ ″	h m		h m		h m	°	°
11. 28	21. 21. 20	4. 13	·0896					
11. 40	19. 0	4. 50	·0903					
12. 6	17. 25	5. 40	·0899					
13. 0	20. 10	6. 0	·0902					
13. 33	18. 0	8. 12	·0903					
14. 5	22. 5	11. 45	·0913					
14. 40	20. 5	12. 32	·0911					
15. 26	21. 35	13. 6	·0913					
19. 50	17. 0	13. 37	·0907					
20. 15	15. 15	15. 22	·0912					
20. 34	16. 50	16. 12	·0921					
20. 46	16. 10	17. 25	·0926					
23. 22	24. 30	18. 18	·0925					
23. 59	29. 0	21. 21	·0909					
		22. 13	·0897					
		22. 54	·0882					
		23. 45	·0892					
		23. 59	·0885					
Sept.21		Sept.21		Sept.21		Sept.21		
0. 0	21. 28. 55	0. 0	·0885	0. 0	·01960	1. 0	61 ·0	62 ·0
0. 15	28. 30	0. 18	·0883	1. 10	·01966	3. 0	62 ·5	64 ·0
1. 24	31. 25	0. 49	·0889	8. 30:	·01680	9. 0	59 ·0	61 ·0
	***	1. 6	·0897	18. 26	{ ·02390 ·02356	21. 0	55 ·0	56 ·0
3. 48	27. 0	2. 42	·0903					
4. 27	23. 35	2. 46	·0907	23. 59	·02057			
4. 56	20. 5	3. 15	·0899					
9. 20	21. 45	3. 45	·0903					
13. 50	21. 30	7. 0	·0908					
14. 18	24. 25	8. 30	·0906					
15. 15	20. 15	13. 13	·0920					
	***	14. 6	·0918					
18. 27	20. 20	14. 45	·0926					
19. 40	16. 0	15. 21	·0925					
20. 45	17. 50	17. 5	·0931					
21. 37	21. 35	18. 42	·0927					
22. 3	22. 0	22. 40	·0888					
23. 59	28. 20	23. 59	·0888					
Sept.22		Sept.22		Sept.22		Sept.22		
0. 0	21. 28. 20	0. 0	·0888	0. 0	·02057	1. 0	59 ·0	60 ·0
1. 20	32. 5	1. 20	·0895	8. 4:	·01276	3. 0	61 ·0	62 ·0
5. 10	23. 5	2. 6	·0889	20. 7	·01800	9. 0	61 ·0	62 ·0
12. 57	20. 20	2. 50	·0891	22. 46	·01863	21. 0	57 ·0	58 ·0
	***	3. 45	·0903	23. 59	·01800			
14. 7	20. 0	4. 30	·0902					
	***	7. 17	·0913					
15. 5	18. 50	8. 43	·0913					
16. 20	17. 55	9. 53	·0920					
	***	11. 40	·0917					
17. 20	20. 0	12. 19	·0922					
	***	12. 45	·0920					
20. 0	16. 10	14. 0	·0922					
20. 43	16. 35	14. 14	·0928					
23. 21	27. 15	15. 30	·0925					
23. 59	28. 5	18. 11	·0931					
		19. 15	·0930					
		21. 55	·0910					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

September 19. The Photographic Traces of the Declination, Horizontal Force, and Vertical Force Magnets were too faint for use.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	° ′ ″	Sept.22 h m		h m		h m	°	°
		22.45	·0910					
		23.49	·0900					
		23.59	·0901					
Sept.23		Sept.23		Sept.23		Sept.23		
0. 0	21.28. 5	0. 0	·0901	0. 0	·01800	1. 0	62·5	63·5
1.36	27.10	1.15	·0909	1.20	·01641	3. 0	65·3	65·5
4.43	20.40	2.15	·0902	5.21	·01213	9. 0	67·0	67·0
9.52	20.30	4.25	·0903	7.36	·01421	21. 0	66·8	67·5
18. 0	17.25		***	10.37	·01542			
	***	8.49	·0921	21.57	·01687			
19.57	14.10		***	23.59	·01618			
	***	15.19	·0925					
21. 4	16.20	16.20	·0920					
	***		***					
22. 6	19.40	18.36	·0920					
22.13	22.10	21.40	·0881					
22.26	21. 5	22.13	·0885					
	***	22.43	·0875					
23.59	28.20	23.45	·0869					
		23.59	·0880					
Sept.24		Sept.24		Sept.24		Sept.24		
0. 0	21.28.20	0. 0	·0880	0. 0	·01618	1. 0	70·0	70·2
0.33	28.30	0.10	·0879	1. 9	·01583	3. 0	72·3	72·5
0.47	35.35	0.27	·0885	7.36	·02500	9. 0	73·0	73·6
	***	0.43	·0907	9.20	·02557	22. 0	67·0	68·0
1.33	33. 0	1.30	·0884	9.33	·02462			
	***	1.59	·0883	9.48	·02537			
2. 8	34.10	2.28	·0873	10. 3	·02471			
	***	2.58	·0871	12.46	·02521			
3. 0	28.30	3.45	·0891	13.10	·02460			
3.10	30. 0	3.58	·0888	13.38	·02577			
3.24	28.20	4.19	·0892	20.38	·03057			
3.36	29.30	4.55	·0886	23.59	·03057			
3.58	27.40	5.28	·0900					
	***	5.43	·0887					
5.15	26.40	5.46	·0892					
5.50	35.35	6.12	·0864					
6.24	26.30	6.45	·0876					
6.40	26.15		***					
6.50	27.10	7.25	·0867					
7. 7	24.30	7.44	·0873					
7.20	25.10	8.12	·0862					
7.40	22.35	8.42	·0872					
8. 5	26.10	9. 6	·0868					
8.39	18.30	9.28	·0831					
9. 0	20.10	9.51	·0880					
9.18	15.30	10. 4	·0861					
9.27	21.18.40	10.12	·0867					
9.53	20.54.50	10.37	·0861					
10. 2	21. 5. 0		***					
10.15	3.10	11.44	·0880					
	***		***					
11.40	17. 5	12.15	·0866					
12. 6	12.25	12.45	·0901					
12.13	15.40	13.15	·0842					
12.32	3. 5	13.43	·0887					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.24 h m	° ′ ″	Sept.24 h m		h m		h m	°	°
12.43	21. 6.30	14.14	·0879					
13.10	21. 9.20		***					
13.32	20.58. 0	15.44	·0895					
14.15	21.17.35		***					
	***	18. 5	·0897					
			***					
14.44	17. 0							
14.50	19. 0	21.14	·0875					
15. 4	17.10	22.15	·0855					
15.10	18.10	22.49	·0871					
	***	22.56	·0856					
15.36	17.30	23.22	·0867					
15.50	13.35	23.36	·0861					
16. 7	17.40	23.59	·0869					
	***							
16.24	16.10							
16.40	17.40							
	***							
17. 4	16.20							
	***							
19.13	17.50							
	***							
20.26	16.10							
	***							
22.10	19.20							
	***							
23. 9	24.30							
23.54	26.40							
23.59	26.50							
Sept.25		Sept.25		Sept.25		Sept.25		
0. 0	21.26.50	0. 0	·0869	0. 0	·03057	6.40	68·2	[illegible]
0. 7	26.30	0.13	·0867	1.56	·03047	21. 0	[illegible]	[illegible]
0.18	29. 5	0.29	·0874	7.18	·02921			
0.32	29. 5	0.56	·0882	17. 4	·03224			
0.50	33.10	1.30	·0868	21.33	·03485			
1.21	28. 0	2.11	·0881	23.59	·03392			
	***	2.22	·0874					
2.10	28.25	3.10	·0874					
	***	3.17	·0879					
3.11	25.30	3.58	·0880					
3.26	26.30	4.12	·0887					
	***	4.25	·0873					
4.13	26.20	5.10	·0881					
4.40	22.10	5.18	·0890					
	***	5.52	·0895					
6.42	22.20	6. 5	·0904					
7.15	19.30	6.30	·0905					
	***	6.58	·0894					
7.53	22.30	7.11	·0906					
	***	7.43	·0903					
8.34	18.35	7.56	·0907					
	***	8.32	·0898					
9.30	22.30	9.18	·0906					
	***	9.30	·0900					
10.28	17.20	9.58	·0909					
10.45	20. 0	10.42	·0904					
	***	11. 0	·0922					
11.13	21. 5	12.11	·0900					
	***							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept.25		Sept.25						
h m	° ′ ″	h m		h m		h m	°	°
12. 15	21. 17. 30	12. 30	·0907					
12. 53	18. 20	13. 0	·0901					
13. 40	16. 30		***					
14. 17	19. 30	18. 0	·0904					
14. 46	18. 0	20. 15	·0895					
14. 50	19. 20	22. 52	·0871					
15. 9	18. 5	23. 59	·0868					
	***							
15. 37	20. 25							
15. 56	18. 10							
16. 43	21. 25							
17. 3	18. 0							
	***							
17. 50	21. 5							
	***							
18. 52	19. 30							
19. 0	17. 10							
19. 5	20. 0							
19. 23	16. 50							
19. 40	18. 45							
	***							
20. 50	18. 20							
	***							
22. 26	22. 10							
	***							
23. 59	28. 20							
Sept.26		Sept.26		Sept.26		Sept.26		
0. 0	21. 28. 20	0. 0	·0868	0. 0	·03392	1. 0	65·0	65·3
0. 25	26. 35		***	7. 26	·03241	3. 0	65·3	66·5
0. 28	25. 50	3. 7	·0885	16. 4	·03383	9. 0	65·0	66·0
0. 36	28. 0	3. 47	·0891	18. 50	{ ·03501	21. 0	61·9	63·2
	***	4. 25	·0901		·03463			
3. 40	24. 0	7. 21	·0913	21. 59	{ ·03354			
4. 10	21. 50	8. 7	·0909		·03220			
4. 20	22. 30	8. 54	·0919	23. 59	·02693			
4. 37	21. 20	9. 30⁏	·0908					
5. 20	21. 10	10. 7	·0921					
5. 45	22. 0	10. 30	·0912					
8. 26	21. 30	11. 7	·0904					
8. 57	20. 0	11. 24	·0909					
9. 11	20. 10	11. 48	·0906					
9. 30	16. 15	12. 11	·0909					
10. 2	15. 20	12. 15	·0907					
10. 10	16. 5	12. 52	·0915					
10. 33	13. 0	13. 33	·0905					
11. 6	17. 0	17. 51	·0906					
11. 15	16. 30	19. 13	·0895					
11. 47	18. 0	19. 44	·0895					
12. 15	15. 10	21. 51	·0864					
13. 17	20. 0	22. 5	·0869					
14. 40	17. 40	22. 38	·0860					
15. 37	19. 5	23. 59	·0883					
16. 41	18. 30							
16. 57	20. 10							
20. 26	19. 30							
20. 42	18. 10							
21. 10	18. 35							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept.26								
h m	° ′ ″	h m		h m		h m	°	°
22. 6	21. 28. 25							
22. 30	28. 10							
	***							
23. 33	24. 0							
23. 59	27. 10							
Sept.27		Sept.27		Sept.27		Sept.27		
0. 0	21. 27. 10	0. 0	·0883	0. 0	·02693	1. 0	63·0	64·0
1. 4	28. 30	1. 3	·0887	0. 15⁏	·02384	3. 0	64·0	65·0
2. 0	28. 35	1. 49	·0882	21. 3	·02769	9. 0	64·5	66·0
5. 20	20. 0	2. 57	·0882	23. 16	·02738	21. 0	61·3	62·5
6. 22	20. 5		***	23. 59	·02683			
7. 21	11. 40	7. 0	·0900					
7. 56	15. 35	7. 21	·0907					
8. 23	14. 15	8. 15	·0898					
8. 43	15. 30		***					
8. 58	14. 0	9. 43	·0906					
9. 36	16. 20	9. 50	·0900					
9. 54	14. 5	10. 0	·0909					
10. 7	15. 35	10. 29	·0888					
10. 38	11. 50	10. 52	·0911					
10. 52	16. 30	11. 12	·0897					
11. 12	15. 0		***					
11. 40	17. 0	11. 45	·0892					
11. 48	15. 30	12. 12	·0911					
11. 57	17. 30	12. 44	·0903					
12. 6	16. 0	13. 21	·0907					
	***	13. 37	·0902					
12. 48	19. 20	13. 57	·0912					
13. 9	15. 20	14. 11	·0908					
13. 26	17. 20	14. 28	·0912					
13. 53	15. 0	14. 54	·0902					
	***	15. 10	·0904					
14. 20	16. 45	15. 36	·0898					
14. 37	15. 50	16. 50	·0897					
15. 7	8. 50	17. 14	·0904					
15. 36	13. 40	17. 35	·0899					
16. 4	15. 40	18. 54	·0894					
16. 38	21. 45	19. 11	·0897					
16. 58	24. 0	20. 45	·0892					
18. 6	17. 40	21. 28	·0872					
18. 46	18. 35	22. 51	·0879					
19. 57	17. 20	23. 0	·0872					
20. 32	18. 25	23. 59	·0872					
21. 11	22. 35							
21. 36	22. 20							
	***							
22. 52	28. 25							
23. 30	29. 25							
23. 45	31. 40							
23. 54	29. 50							
23. 59	31. 30							
Sept.28		Sept.28		Sept.28		Sept.28		
0. 0	21. 31. 35	0. 0	·0872	0. 0	·02683	1. 0	64·0	65·3
0. 40	32. 25	0. 31	·0881	7. 50	·02241	3. 0	65·8	66·2
	***	1. 30	·0865	14. 3	·02286	9. 0	66·0	66·4
1. 37	30. 20		***	19. 4	·02460	21. 0	60·0	61·3
	***							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁏ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 28		Sept. 28		Sept. 28				
h m	° ′ ″	h m		h m		h m	°	°
2. 15	21. 32. 30	2. 19	·0876	21. 58	·02663			
	***	2. 50	·0869	23. 59	·02658			
2. 56	31. 30	3. 15	·0872					
3. 22	28. 35	3. 29	·0882					
3. 30	29. 30	4. 11	·0870					
3. 59	27. 5	4. 44	·0877					
4. 20	27. 20	4. 57	·0871					
4. 50	23. 30	5. 14	·0885					
5. 10	20. 40	5. 36	·0882					
5. 29	22. 20	6. 40	·0885					
6. 9	21. 25	6. 55	·0896					
6. 50	14. 20	7. 15	·0921					
7. 15	16. 30	7. 33	·0887					
7. 30	23. 0	7. 55	·0902					
7. 48	12. 10	8. 22	·0887					
8. 26	15. 45	8. 40	·0885					
8. 40	16. 20	8. 49	·0891					
8. 54	13. 30	9. 42	·0883					
9. 47	14. 25	10. 10	·0912					
10. 3	6. 40	10. 50	·0876					
10. 20	9. 0	11. 16	·0888					
10. 28	7. 30	11. 54	·0885					
10. 47	10. 0	13. 22	·0889					
11. 6	9. 20	13. 45	·0885					
11. 45	14. 0	18. 58	·0893					
	***	21. 40	·0871					
13. 38	10. 45	23. 0	·0865					
14. 37	17. 0	23. 59	·0869					
	***							
17. 15	19. 20							
19. 10	16. 45							
	***							
19. 52	15. 10							
21. 3	16. 30							
21. 28	17. 35							
21. 50	17. 30							
22. 39	22. 0							
23. 59	23. 45							
Sept. 29		Sept. 29		Sept. 29		Sept. 29		
0. 0	21. 23. 45	0. 0	·0869	0. 0	·02658	1. 0	62·8	63·6
0. 53	27. 40	1. 39	·0881	2. 17	·02526	3. 0	64·0	65·0
1. 56	28. 5	3. 50	·0880	5. 6	·02260	9. 0	62·5	63·8
7. 0	20. 0	5. 21	·0885		·02308	21. 0	59·0	60·0
7. 20	18. 5	5. 52	·0893	7. 6	·02404			
7. 47	18. 30	6. 59	·0897	12. 28	·02551			
8. 37	15. 45	7. 12	·0889	22. 14	·03043			
9. 7	18. 40	7. 21	·0893	23. 59	·03029			
10. 6	16. 10	8. 30	·0886					
10. 40	22. 20	9. 39	·0901					
11. 20	17. 0	10. 14	·0898					
11. 43	16. 10	10. 22	·0904					
13. 10	19. 25	10. 30	·0902					
13. 40	18. 30	10. 39	·0909					
17. 52	18. 40	12. 44	·0903					
20. 20	13. 20	18. 52	·0913					
21. 26	15. 10	21. 32	·0890					
23. 59	27. 0		(†)					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 30		Sept. 30		Sept. 30		Sept. 30		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 27. 0		(†)	0. 0	·03029	1. 0	61·[illegible]	[illegible]
2. 10	30. 10	1. 0	·0900*	4. 15	·02961	3. 0	62·[illegible]	[illegible]
3. 37	24. 45	2. 30	·0909	11. 10	·02700	9. 0	63·0	[illegible]
5. 20	21. 30	3. 32	·0909	20. 50	·02796	21. 0	62·[illegible]	63·5
5. 40	18. 25	4. 27	·0916		·02540			
6. 15	20. 40	5. 24	·0911	23. 59	·02566			
9. 20	19. 0	5. 44	·0918					
9. 48	19. 30	7. 15	·0921					
10. 0	15. 0	9. 42	·0913					
10. 22	17. 5	10. 0	·0938					
10. 43	20. 40	10. 46	·0913					
11. 15	19. 0	11. 11	·0919					
11. 49	15. 55	11. 18	·0917					
12. 30	18. 0	11. 40	·0922					
13. 0	17. 5	12. 25	·0912					
13. 33	19. 35	13. 53	·0909					
16. 3	19. 30	15. 56	·0911					
16. 13	20. 40	16. 29	·0917					
16. 33	18. 5	17. 51	·0916					
16. 56	17. 35	18. 55	·0902					
17. 15	18. 10	19. 52	·0919					
18. 22	16. 35	21. 35	·0895					
	***	22. 19	·0893					
18. 56	18. 30	23. 10	·0880					
19. 6	17. 10	23. 47	·0887					
19. 22	20. 45	23. 59	·0890					
19. 29	19. 5							
19. 33	20. 30							
19. 40	17. 20							
19. 47	20. 0							
20. 0	17. 20							
20. 17	14. 30							
20. 33	16. 45							
21. 14	16. 0							
	***							
22. 43	22. 35							
23. 7	21. 50							
23. 59	25. 45							
Oct. 1		Oct. 1		Oct. 1		Oct. 1		
0. 0	21. 25. 45	0. 0	·0890	0. 0	·02566	1. 0	64·8	[illegible]
	***		***	1. 5	·02537	3. 0	66·5	[illegible]
0. 36	27. 15	1. 5	·0891		·02606	9. 0	65·7	[illegible]
0. 54	29. 30	1. 28	·0898	1. 50	·02639	22. 30	[illegible]	[illegible]
1. 47	29. 45	1. 48	·0898		·02742			
1. 57	31. 50	1. 54	·0906	2. 25	·02717			
2. 0	29. 35	2. 0	·0895		·02836			
2. 13	29. 10		***	3. 46	·02823			
2. 27	30. 0	3. 47	·0900	6. 53	·03520			
3. 46	26. 40	4. 7	·0916	7. 30	·03561			
4. 4	29. 30	4. 12	·0910	7. 49	·03653			
4. 16	27. 35		***	8. 36	·03534			
5. 30	27. 10	6. 20	·0909	9. 4	·03580			
5. 51	29. 20	6. 42	·0897	9. 20	·03702			
6. 15	27. 50	7. 0	·0913		***			
6. 32	29. 30	7. 40	·0897	11. 8	·03541			
6. 57	26. 0	7. 50	·0907	11. 45	·03580			
7. 7	30. 0	7. 56	·0902	12. 0	·03458			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometer. Of H. F. Magnet.	Readings of Thermometer. Of V. F. Magnet.
Oct. 1		Oct. 1		Oct. 1				
h m	° ′ ″	h m		h m		h m	°	°
7.37	21.29.40	8.4	·0907	12.13	·03590			
7.56	18.0	8.13	·0884	21.3	·03918			
8.10	27.40	8.28	·0908	23.59	·03918			
8.22	16.10	8.44	·0887					
8.40	23.0	9.20	·0867					
8.51	20.0	9.30	·0885					
9.19	17.0	9.40	·0871					
9.30	11.10	10.0	·0877					
9.40	17.0	10.15	·0868					
9.46	12.30	10.20	·0878					
10.2	21.14.30	10.43	·0859					
10.50	20.56.45	11.10	·0854					
11.6	21.2.0	11.21	·0840					
11.22	20.56.35	11.28	·0847					
11.43	21.4.35	11.42	·0847					
	(†)	11.50	·0857					
12.47	12.0	11.54	·0845					
12.52	16.5	12.12	·0918					
13.6	12.25	12.25	·0896					
13.27	19.10	12.40	·0900					
	***	12.54	·0872					
14.9	20.35	13.11	·0881					
14.20	19.10	14.13	·0881					
14.26	21.50	14.22	·0887					
14.43	19.25	14.43	·0883					
15.4	20.30	15.27	·0891					
15.30	19.35	18.0	·0888					
	***	19.13	·0894					
21.11	17.50	21.45	·0871					
	***	21.59	·0873					
22.6	19.50	22.15	·0867					
22.21	18.25	22.28	·0870					
22.40	21.20	22.41	·0866					
22.57	21.20	23.9	·0869					
23.20	24.20	23.20	·0865					
23.59	25.10	23.30	·0866					
		23.45	·0859					
		23.59	·0867					
Oct. 2		Oct. 2		Oct. 2		Oct. 2		
0.0	21.25.10	0.0	·0867	0.0	·03918	8.0	66·0	67·0
0.30	26.30	0.16	·0868	1.17	·03887	21.0	64·0	65·5
1:15	26.15	0.35	·0863	4.34	·03611			
1.37	29.10	1.6	·0864	6.35	·03913			
2.6	27.0	1.24	·0874	8.0	·03902			
2.25	28.35	1.51	·0865	8.30	·03778			
2.42	27.15	2.11	·0873	9.6	·03780			
2.50	28.5	2.29	·0866	9.25	·03621			
	***	3.40	·0877	10.27	·03772			
3.20	26.0	3.51	·0885	11.13	·03770			
3.30	22.10	3.54	·0884	11.42	·03698			
3.39	24.45	4.7	·0891	12.5	·03725			
4.5	20.10	4.31	·0889	13.4	·03661			
4.22	27.0	4.50	·0900	14.39	·03800			
4.53	24.10	5.15	·0863	22.14	·03964			
5.20	32.30	5.36	·0864	23.59	·03911			
5.50	27.25	5.52	·0877					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 2		Oct. 2						
h m	° ′ ″	h m		h m		h m	°	°
6.3	21.30.30	6.12	·0864					
6.24	23.20	6.22	·0875					
	***	6.34	·0869					
6.53	20.10	6.46	·0876					
7.30	12.20	7.10	·0869					
7.40	14.0	7.20	·0873					
8.9	6.0	7.28	·0866					
8.37	16.50	7.39	·0874					
	***	7.49	·0851					
9.10	11.30	8.22	·0874					
9.32	18.50	8.44	·0856					
10.4	7.45	9.10	·0897					
10.15	3.0	9.40	·0854					
10.37	9.50	10.4	·0877					
10.43	6.45	10.10	·0874					
10.52	10.30	10.28	·0885					
11.5	9.25	10.37	·0867					
11.20	11.30	10.47	·0878					
11.51	3.25	10.54	·0876					
12.9	4.10	11.11	·0888					
12.15	8.35	11.39	·0887					
12.23	8.50	11.50	·0874					
12.26	11.20	11.56	·0878					
12.40	10.30	12.0	·0873					
13.0	22.0	12.9	·0877					
	***	12.27	·0867					
13.18	18.5	12.43	·0878					
13.30	19.0	12.54	·0876					
13.42	16.30	13.13	·0887					
	***	14.30	·0884					
14.33	19.20	15.24	·0895					
	***	15.38	·0889					
14.50	17.0	15.49	·0895					
	***	16.40	·0882					
15.10	18.35	19.12	·0892					
15.20	16.20	22.18	·0873					
	***	22.29	·0881					
15.52	20.35	22.43	·0872					
16.10	19.30	23.59	·0853					
16.23	21.30							
16.28	18.15							
16.33	21.30							
	***							
18.57	18.10							
19.10	16.10							
19.20	18.0							
	***							
20.53	17.5							
21.37	20.25							
21.54	20.10							
22.9	21.50							
22.26	20.40							
22.37	23.30							
22.48	22.25							
	***							
23.47	29.0							
23.59	28.20							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 3		Oct. 3		Oct. 3		Oct. 3		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 28. 20	0. 0	·0853	0. 0	·03911	1. 0	67·0	68·0
0. 10	28. 25	0. 50	·0865	1. 4[illegible]	·03846	3. 0	69·0	70·0
0. 28	30. 0	1. 55	·0861		·01903	9. 0	66·0	67·0
1. 17	28. 25	2. 22	·0885	8. 50	·01862	21. 0	64·0	66·0
1. 50	27. 0	2. 45	·0877	14. 42	·02069			
2. 4	23. 20	6. 20	·0881	18. 43	·02318			
2. 29	26. 20	7. 9	·0914	23. 59	·02263			
2. 54	24. 40	7. 21	·0899					
3. 18	25. 0	7. 39	·0900					
6. 27	19. 15	7. 51	·0885					
6. 47	10. 30	8. 21	·0887					
7. 9	15. 25	9. 3	·0901					
7. 13	13. 40	10. 7	·0896					
7. 42	19. 30	10. 36	·0898					
7. 56	18. 30	11. 30	·0895					
8. 30	9. 40	12. 19	·0899					
8. 49	11. 15	15. 30	·0897					
8. 57	14. 25	16. 15	·0905					
9. 15	13. 30	17. 6	·0903					
9. 49	18. 0	17. 33	·0897					
10. 21	19. 20	18. 10	·0905					
10. 52	17. 0	20. 0	·0895					
11. 50	18. 15	20. 14	·0896					
12. 33	21. 25	23. 33	·0851					
13. 8	19. 45	23. 46	·0854					
14. 50	19. 50		(†)					
15. 37	22. 10							
16. 50	20. 0							
17. 53	21. 20							
19. 47	18. 30							
20. 18	18. 50							
20. 56	23. 5							
22. 0	20. 30							
23. 15	25. 10							
23. 37	23. 45							
23. 59	25. 25							
Oct. 4		Oct. 4		Oct. 4		Oct. 4		
0. 0	21. 25. 25		(†)	0. 0	·02263	1. 0	69·0	70·2
0. 30	27. 30	0. 49	·0859	1. 32	·02197	3. 0	72·5	73·8
	***	1. 10	·0865	3. 0	·01843	9. 0	72·3	73·3
2. 20	25. 25	2. 7	·0845	4. 26	·01930	21. 0	64·0	66·0
2. 45	28. 20	3. 26	·0854	7. 31	·01841			
3. 37	28. 5	4. 4	·0836	10. 32	·01877			
3. 58	25. 40	4. 26	·0897	10. 57	·01836			
4. 18	5. 0	4. 49	·0871	18. 15	·02396			
4. 40	13. 30	5. 0	·0874	23. 59	·02360			
4. 54	13. 20	5. 28	·0865					
5. 20	18. 20	5. 38	·0867					
5. 45	20. 0	6. 0	·0853					
6. 0	18. 0	6. 22	·0899					
6. 15	8. 10	6. 40	·0871					
6. 34	19. 20	6. 49	·0882					
6. 44	14. 30	7. 0	·0871					
7. 10	21. 25	7. 17	·0864					
7. 56	16. 30	7. 42	·0860					
8. 15	17. 45	9. 30	·0876					
9. 54	17. 50	9. 51	·0882					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 4		Oct. 4						
h m	° ′ ″	h m		h m		h m	°	°
10. 26	21. 15. 0	10. 22	·0879					
10. 53	28. 10	10. 40	·0893					
11. 10	20. 0	10. 57	·0882					
12. 24	13. 50	11. 8	·0885					
13. 26	18. 0	11. 22	·0880					
13. 43	17. 0	11. 56	·0889					
15. 57	18. 55	14. 14	·0886					
16. 26	22. 10	16. 26	·0890					
17. 40	22. 0	17. 10	·0897					
19. 0	16. 40	19. 9	·0880					
19. 43	16. 30	21. 5	·0885					
20. 21	15. 0	23. 59	·0871					
22. 9	20. 10							
22. 28	20. 0							
22. 37	22. 25							
23. 59	27. 20							
Oct. 5		Oct. 5		Oct. 5		Oct. 5		
0. 0	21. 27. 20	0. 0	·0871	0. 0	·02360	1. 0	[illegible]	68·0
0. 16	28. 50	0. 45	·0861	3. 8	·02142	3. 0	68·0	69·7
0. 33	28. 0	2. 40	·0867	7. 6	·01723	[illegible]	69·0	70·0
0. 47	29. 35	3. 10	·0879	10. 50	·01763	21. 0	64·8	66·5
0. 56	27. 20	3. 27	·0877	11. 17	·01780			
1. 13	28. 10	4. 31	·0883	16. 13	·01836			
2. 3	27. 30	4. 40	·0880	22. 17	·02118			
2. 10	28. 50	4. 54	·0887	23. 59	·02122			
2. 27	27. 20	5. 10	·0884					
4. 39	26. 0	6. 40	·0895					
6. 24	21. 40	7. 50	·0896					
7. 40	23. 10	8. 29	·0891					
8. 38	21. 20	8. 43	·0897					
8. 52	23. 0	9. 0	·0896					
9. 7	17. 35	9. 12	·0901					
10. 40	19. 25	9. 30	·0893					
10. 50	17. 10	10. 2	·0896					
10. 59	22. 0	10. 12	·0899					
11. 20	12. 5	10. 39	·0891					
11. 43	21. 40	10. 52	·0921					
12. 40	22. 55	11. 11	·0902					
13. 15	16. 30	11. 30	·0907					
14. 0	16. 25	11. 52	·0896					
14. 38	19. 25	14. 16	·0891					
14. 50	18. 20	16. 2	·0899					
14. 57	19. 20	20. 14	·0891					
15. 23	17. 15	20. 44	·0895					
15. 40	18. 30	22. 22	·0879					
	***	23. 17	·0876					
20. 37	16. 30	23. 59	·0877					
21. 41	20. 0							
21. 53	19. 10							
22. 29	21. 30							
23. 59	24. 30							
Oct. 6		Oct. 6		Oct. 6		Oct. 6		
0. 0	21. 24. 30	0. 0	·0877	0. 0	·02122	1. 0	66·5	[illegible]
0. 40	25. 30	0. 44	·0876	1. 15	·02130	3. 0	68·0	69·8
1. 20	29. 25	1. 10	·0881	4. 26	·01771	9. 0	[illegible]	[illegible]

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

VERTICAL FORCE.—October 3d. 1h. Mr. Glaisher altered the adjustments, [illegible] 0·02437 parts of the whole Vertical Force.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 6		Oct. 6		Oct. 6		Oct. 6		
h m	° ′ ″	h m		h m		h m	°	°
2. 9	21. 26. 35	1. 54	·0872	5. 34	{ ·01782 ·01877	21. 0	66·0	67·8
	***	3. 19	·0879					
3. 6	27. 10	3. 42	·0886	6. 21	·01793			
3. 20	25. 30	4. 40	·0883	11. 36	·01856			
3. 54	25. 5	5. 3	·0888	16. 3	·02010			
4. 47	21. 20	5. 30	·0886	22. 0	·02124			
5. 13	21. 30	6. 19	·0889	23. 59	·02120			
6. 15	18. 30	6. 38	·0894					
6. 40	20. 25	6. 58	·0887					
8. 52	15. 10	7. 39	·0894					
9. 20	17. 5	8. 28	·0891					
9. 51	14. 10	9. 19	·0911					
10. 20	13. 0	9. 51	·0897					
10. 45	19. 0	10. 14	·0901					
11. 33	6. 25	10. 22	·0899					
12. 51	14. 20	10. 45	·0905					
14. 57	18. 10	11. 11	·0897					
15. 8	17. 30	12. 7	·0893					
15. 57	19. 30	13. 39	·0903					
16. 20	17. 35	14. 39	·0897					
16. 50	19. 30	14. 51	·0900					
18. 24	18. 10	15. 13	·0897					
18. 37	16. 10	15. 39	·0902					
18. 45	17. 20	15. 51	·0899					
19. 10	14. 25	16. 17	·0904					
19. 20	16. 0	16. 55	·0902					
20. 9	15. 30	18. 43	·0904					
22. 28	18. 30	19. 51	·0893					
22. 50	20. 40	20. 13	·0895					
23. 47	22. 25	20. 51	·0882					
23. 59	23. 50	21. 45	·0885					
		23. 30	·0881					
		23. 59	·0885					
Oct. 7		Oct. 7		Oct. 7		Oct. 7		
0. 0	21. 23. 55	0. 0	·0885	0. 0	·02120	1. 0	67·0	68·0
0. 35	27. 0	1. 39	·0891	1. 36	·02123	3. 0	68·0	70·0
0. 54	27. 0	2. 6	·0877	3. 20	·02022	9. 0	68·5	69·5
1. 15	31. 20	2. 57	·0885	5. 51	·01768	21. 0	64·0	66·0
2. 13	29. 40	3. 14	·0883	13. 10	·01877			
2. 30	31. 55	4. 0	·0896	18. 40	·02180			
2. 56	32. 0	4. 58	·0895	21. 45	·02378			
4. 4	24. 15	6. 2	·0901	23. 59	·02396			
4. 26	25. 30	6. 41	·0900					
6. 59	22. 20	7. 21	·0907					
10. 8	21. 0	9. 37	·0904					
10. 24	21. 50	10. 11	·0907					
10. 44	20. 30	10. 27	·0905					
18. 22	18. 40	11. 7	·0907					
20. 10	16. 0	11. 32	·0911					
22. 3	17. 40	14. 19	·0908					
22. 21	20. 30	18. 30	·0911					
22. 43	19. 45	22. 0	·0887					
22. 57	23. 0	22. 22	·0891					
23. 10	22. 25	22. 40	·0886					
23. 59	25. 35	23. 0	·0891					
		23. 14	·0887					
		Oct. 7						
h m	° ′ ″	h m		h m		h m	°	°
		23. 45	·0888					
		23. 59	·0895					
Oct. 8		Oct. 8		Oct. 8		Oct. 8		
0. 0	21. 25. 35	0. 0	·0895	0. 0	·02396	1. 0	65·0	66·0
0. 30	27. 25	2. 5	·0893	2. 43	·02400	3. 0	66·0	67·5
3. 18	26. 35	3. 21	·0903	9. 7:	·02018	9. 0	66·5	67·8
5. 30	22. 40	3. 45	·0901	16. 46	·02461	22. 38	60·4	61·8
7. 42	22. 10	5. 21	·0906	23. 59	·02410			
8. 37	19. 20	6. 8	·0910					
9. 18	21. 30	7. 40	·0908					
18. 30	18. 45	8. 2	·0905					
20. 26	17. 25	8. 30	·0909					
22. 2	20. 0	13. 52	·0914					
23. 59	29. 15	18. 10	·0920					
		21. 12	·0900					
		23. 27	·0898					
		23. 59	·0897					
Oct. 9		Oct. 9		Oct. 9		Oct. 9		
0. 0	21. 29. 15	0. 0	·0897	0. 0	·02410	8. 27	64·8	66·2
0. 57	29. 30	4. 9	·0903	1. 46	·02390	21. 0	62·5	64·0
4. 50	22. 10	5. 43	·0911	4. 18	·02109			
20. 58	17. 40	8. 42	·0915	7. 10	·01823			
23. 59	26. 30	9. 10	·0919	13. 22	·01688			
		10. 15	·0911	18. 0	·01760			
		13. 43	·0913	21. 50	·01903			
		17. 50	·0919	23. 59	·01932			
		22. 43	·0887					
		23. 59	·0891					
Oct. 10		Oct. 10		Oct. 10		Oct. 10		
0. 0	21. 26. 30	0. 0	·0891	0. 0	·01932	1. 0	63·0	64·0
1. 15	26. 20	2. 28	·0905	3. 15	·01883	3. 0	63·5	65·0
4. 45	21. 25	4. 45	·0903	9. 36:	·01721	9. 0	63·0	64·5
16. 37	19. 25	8. 10	·0916	20. 13	·02096	21. 0	60·0	61·4
16. 58	20. 30	11. 52	·0919	23. 59	·02159			
	***	12. 16	·0921					
20. 20	15. 5	14. 58	·0921					
	***	17. 45	·0927					
21. 26	17. 15	21. 0	·0905					
23. 59	29. 10	23. 7	·0897					
		23. 20	·0895					
		23. 59	·0894					
Oct. 11		Oct. 11		Oct. 11		Oct. 11		
0. 0	21. 29. 10	0. 0	·0894	0. 0	·02159	1. 0	61·0	62·0
1. 34	28. 20	0. 53	·0899	3. 10	·02118	3. 0	61·3	62·0
1. 45	30. 20	1. 26	·0894		(†)	9. 0	60·7	61·0
	***	1. 42	·0900	8. 45	·02100	21. 0	58·0	59·5
4. 40	26. 30	2. 6	·0900	10. 15	·02221			
	(†)	2. 42	·0909	13. 47	·02262			
8. 45	16. 0	3. 7	·0905	14. 17	·02183			
9. 20	18. 0	4. 43	·0924	16. 56	·02269			
9. 54	17. 20	5. 7	·0921	20. 33	·02441			
10. 57	19. 25		(†)	23. 59	·02430			
13. 6	17. 0	8. 45	·0925					
13. 15	19. 50	8. 55	·0931					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Oct. 11		Oct. 11						
h m	° ′ ″	h m		h m		h m	°	°
13. 37	21. 16. 20	9. 16	·0919					
13. 50	25. 35	9. 33	·0925					
14. 34	5. 30		***					
14. 56	15. 35	10. 52	·0929					
	***	11. 22	·0924					
15. 13	17. 30	11. 44	·0928					
	***	12. 17	·0921					
15. 50	15. 30	12. 34	·0923					
16. 4	11. 0	13. 0	·0917					
16. 38	17. 45	13. 15	·0921					
16. 50	16. 10	13. 32	·0913					
17. 7	19. 20	13. 58	·0942					
	***	14. 42	·0897					
17. 26	19. 30	15. 40	·0935					
17. 32	18. 0	15. 51	·0920					
	***	15. 58	·0929					
17. 58	21. 30	16. 10	·0921					
18. 4	19. 50	16. 12	·0923					
18. 10	22. 0	16. 15	·0919					
	***	16. 26	·0925					
18. 34	18. 30		***					
18. 40	21. 0	17. 21	·0915					
18. 50	17. 5		***					
18. 54	20. 0	17. 59	·0925					
19. 3	19. 10	18. 4	·0918					
	***	18. 11	·0925					
20. 0	18. 25	18. 15	·0916					
20. 8	20. 50	18. 18	·0923					
20. 16	17. 10	18. 39	·0919					
20. 45	23. 10	18. 42	·0922					
	***	18. 45	·0911					
21. 30	21. 30	18. 51	·0916					
21. 57	26. 30	19. 11	·0906					
22. 5	30. 10	19. 52	·0901					
	***	20. 36	·0907					
22. 50	34. 0	21. 52	·0878					
23. 17	31. 50	22. 55	·0879					
23. 45	34. 25	23. 16	·0871					
23. 56	38. 30	23. 47	·0873					
23. 59	38. 0		(†)					
Oct. 12		Oct. 12		Oct. 12		Oct. 12		
0. 0	21. 37. 55		(†)	0. 0	·02430	1. 0	61·0	62·0
0. 8	36. 35	1. 0	·0892*	1. 26	·02341	3. 0	63·0	64·0
0. 20	39. 50	3. 0	·0980*	2. 50	·02363	9. 0	63·3	64·4
0. 29	36. 40	10. 12	·0798	3. 10	·02607	21. 0	58·5	60·0
0. 43	33. 10	10. 22	·0787	3. 25	·02342			
1. 0	41. 50	10. 37	·0806	3. 33	·02680			
1. 10	38. 0	10. 42	·0790	3. 40	·02400			
1. 17	41. 10	11. 0	·0819	3. 45	·02720			
1. 28	37. 15	11. 11	·0811	3. 48	·02329			
1. 40	44. 30	12. 7	·0837	3. 50	·02937			
1. 50	41. 50	12. 50	·0831	4. 4	·02003			
1. 57	44. 30		***	4. 7	·02695			
2. 13	21. 39. 30	15. 37	·0841	4. 16	·01820			
2. 20	22. 5. 5	16. 11	·0850	4. 21	·02302			
2. 24	21. 47. 5	17. 43	·0841	4. 38	·01520			
2. 44	22. 1. 50		***	4. 47	·02063			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Oct. 12		Oct. 12		Oct. 12				
h m	° ′ ″	h m		h m		h m	°	°
2. 46	21. 48. 15	20. 39	·0855	4. 51	·01462			
2. 56	56. 45	20. 54	·0849	5. 2	·01783			
3. 0	30. 5	23. 14	·0839	5. 5	[illegible]			
3. 7	39. 10	23. 30	·0841	5. 10	·01502			
3. 10	22. 15		(†)	5. 15	·00985			
3. 21	50. 50			5. 18	[illegible]			
3. 30	25. 10			5. 26	·01210			
3. 33	43. 0			5. 32	·01563			
3. 36	18. 20			5. 34	·01324			
3. 40	41. 50			5. 50	·02376			
3. 47	24. 10			5. 57	·00543			
3. 56	51. 0			6. 20	·01896			
4. 6	12. 15			6. 26	·01780			
4. 9	54. 30			6. 40	·02058			
4. 18	9. 35			6. 43	·01980			
	(†)			7. 0	·02145			
6. 15	37. 30			7. 6	·02063			
6. 26	18. 20			7. 33	·02140			
6. 34	27. 40			7. 51	·02163			
6. 50	19. 20			8. 4	·01824			
7. 4	22. 30			8. 6	·01977			
7. 10	11. 30			8. 20	·01442			
7. 18	22. 20			8. 37	·01850			
7. 24	8. 25				***			
7. 28	26. 10			9. 30	·01903			
7. 37	33. 45				***			
7. 50	14. 10			9. 40	·01820			
8. 20	24. 0			9. 44	·01663			
8. 26	20. 30			9. 58	·01844			
8. 40	26. 0				***			
8. 53	7. 30			10. 40	·01749			
9. 4	26. 0			10. 56	·01820			
9. 10	0. 30			14. 0	·01876			
9. 32	21. 20			18. 36	·02165			
10. 4	6. 40			21. 28	·02342			
10. 23	12. 30			23. 59	·02400			
	***							
11. 20	22. 20							
	***							
12. 47	20. 10							
	***							
14. 58	23. 20							
	***							
17. 56	21. 25							
	***							
19. 48	16. 30							
	***							
21. 8	19. 10							
	***							
22. 42	26. 30							
	(†)							
Oct. 13		Oct. 13		Oct. 13		Oct. 13		
	(†)		(†)	0. 0	·02400	1. 0	60·0	61·0
0. 26	21. 26. 20	0. 15	·0849	3. 4	·02268	3. 0	61·8	63·0
	***	0. 33	·0846	8. 26	·01760	9. 0	60·4	61·3
1. 33	27. 20	1. 51	·0848	15. 15	·02041	21. 0	57·7	58·0
	***	2. 27	·0862		(†)			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 13		Oct. 13		Oct. 13				
h m	° ′ ″	h m		h m		h m	°	°
2. 13	21. 25. 30	2. 57	·0869	21. 0	·02316			
	***	3. 11	·0867	22. 52	·02448			
2. 56	24. 10	3. 30	·0872	23. 59	·02397			
3. 26	22. 35	3. 42	·0867					
3. 43	23. 0	3. 58	·0868					
4. 5	21. 20	4. 7	·0877					
4. 15	23. 0	4. 15	·0872					
4. 23	21. 20	4. 40	·0877					
4. 37	22. 0	4. 52	·0873					
	***	5. 6	·0876					
6. 24	15. 35	5. 21	·0874					
8. 9	19. 50	6. 0	·0874					
8. 33	18. 15	7. 30	·0890					
8. 50	18. 40	8. 15	·0887					
9. 4	18. 0	8. 36	·0891					
9. 40	19. 30	8. 57	·0891					
9. 57	18. 0	10. 0	·0899					
10. 18	18. 0	10. 25	·0912					
10. 40	21. 35	10. 52	·0903					
11. 21	17. 30	11. 37	·0905					
11. 43	20. 0	12. 0	·0899					
12. 33	19. 5	16. 0	·0904					
13. 22	18. 20		(†)					
13. 40	19. 35	21. 0	·0882					
14. 15	18. 0	22. 30	·0864					
15. 15	20. 50	22. 50	·0867					
15. 40	19. 30	23. 21	·0865					
15. 47	19. 50	23. 59	·0873					
	(†)							
21. 0	20. 30							
23. 20	28. 25							
23. 37	30. 45							
23. 59	30. 25							
Oct. 14		Oct. 14		Oct. 14		Oct. 14		
0. 0	21. 30. 25	0. 0	·0873	0. 0	·02397	1. 0	61 ·0	62 ·5
0. 56	29. 30	1. 37	·0867	3. 13	·01957	3. 0	63 ·0	64 ·8
1. 47	28. 0	2. 6	·0872		·01860	9. 0	63 ·5	64 ·7
4. 37	19. 50	3. 40	·0870	12. 36	·01893	21. 0	60 ·0	61 ·0
8. 45	18. 30	10. 43	·0895	21. 32	·02261			
9. 9	16. 10	11. 11	·0903	23. 59	·02230			
9. 38	17. 35	12. 30	·0898					
10. 40	17. 30	13. 55	·0904					
11. 15	18. 30	16. 39	·0902					
11. 32	18. 0	17. 15	·0909					
11. 50	15. 20	18. 7	·0902					
12. 0	15. 35	19. 40	·0897					
12. 23	15. 30	20. 40	·0881					
14. 28	17. 0	21. 13	·0884					
14. 54	16. 0	22. 40	·0877					
15. 45	17. 35	23. 43	·0881					
17. 5	16. 50		(†)					
18. 4	18. 35							
20. 38	16. 20							
21. 24	19. 30							
22. 10	20. 50							
23. 28	27. 20							
	(†)							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 15		Oct. 15		Oct. 15		Oct. 15		
h m	° ′ ″	h m		h m		h m	°	°
	(†)		(†)	0. 0	·02230	1. 0	62 ·0	63 ·0
0. 46	21. 30. 10	0. 6	·0877	5. 30	·01921	3. 0	63 ·0	64 ·0
1. 40	32. 30	0. 25	·0879	7. 8	·01928	9. 0	63 ·5	65 ·0
2. 9	31. 40	0. 37	·0883	7. 36	·01870	22. 20	62 ·5	63 ·0
2. 40	27. 0	0. 40	·0881		·02001			
2. 50	28. 0	1. 11	·0887	11. 15	·01885			
3. 4	26. 20	1. 37	·0882	17. 45	·01894			
3. 20	26. 0	2. 10	·0883	21. 45	·01971			
3. 27	27. 20	2. 36	·0901	23. 59	·01971			
3. 50	23. 0	2. 54	·0884					
4. 10	16. 20	3. 0	·0887					
4. 26	18. 30	3. 7	·0882					
5. 2	23. 40	3. 17	·0896					
5. 26	22. 10	3. 28	·0893					
5. 40	23. 0	3. 42	·0897					
5. 56	21. 20	4. 11	·0882					
6. 12	23. 25	4. 16	·0883					
6. 26	21. 45	4. 22	·0881					
6. 38	22. 0	4. 30	·0885					
6. 54	16. 0	4. 50	·0879					
7. 20	29. 0	5. 10	·0886					
7. 37	13. 50	5. 20	·0880					
7. 53	16. 10	5. 43	·0883					
8. 20	13. 0	6. 11	·0920					
8. 40	16. 30	6. 22	·0878					
9. 15	15. 0	6. 43	·0901					
9. 24	12. 30	7. 11	·0886					
9. 36	13. 0	7. 21	·0889					
9. 50	11. 20	7. 40	·0882					
10. 47	14. 0	9. 7	·0882					
11. 20	10. 50	9. 43	·0893					
12. 9	16. 40	10. 22	·0889					
14. 15	18. 0	12. 11	·0896					
15. 10	16. 30	12. 23	·0894					
15. 27	17. 30	13. 17	·0897					
15. 52	16. 50	13. 44	·0895					
16. 12	19. 0	15. 1	·0907					
16. 37	15. 0	15. 53	·0898					
17. 20	13. 30	18. 30	·0896					
18. 10	16. 20	19. 10	·0885					
19. 12	15. 0		(†)					
19. 26	13. 5	23. 15	·0871					
19. 37	14. 0	23. 59	·0870					
19. 56	13. 30							
20. 8	12. 5							
20. 26	14. 0							
20. 40	12. 40							
21. 3	15. 0							
21. 27	14. 10							
22. 30	21. 35							
23. 59	26. 30							
Oct. 16		Oct. 16		Oct. 16		Oct. 16		
0. 0	21. 26. 30	0. 0	·0870	0. 0	·01971	7. 15	63 ·0	64 ·0
1. 57	28. 0	0. 27	·0873	1. 50	·01954	21. 0	59 ·4	59 ·8
3. 34	24. 0	0. 58	·0869	3. 13	·01890			
4. 36	20. 0	1. 28	·0877	4. 7	·01906			
	***	2. 10	·0878		·02025			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 16		Oct. 16		Oct. 16				
h m	° ′ ″	h m		h m		h m	°	°
6. 8	21. 19. 30	2. 26	·0874	9. 4	·01962			
6. 21	21. 10	4. 30	·0889	12. 40	·02107			
6. 37	19. 30	6. 3	·0884	19. 4	·02504			
6. 43	20. 20	6. 51	·0886	23. 59	·02520			
7. 23	16. 30	8. 6	·0902					
7. 50	16. 35	8. 17	·0901					
8. 33	8. 10	8. 29	·0904					
8. 52	8. 15	8. 37	·0901					
9. 36	14. 35	8. 44	·0907					
10. 28	16. 30	8. 58	·0900					
11. 4	15. 5	9. 17	·0897					
12. 21	16. 5	10. 36	·0908					
12. 50	13·50	11. 12	·0906					
13. 9	10. 30	11. 29	·0911					
13. 40	18. 0	11. 51	·0907					
14. 32	13. 25	12. 15	·0918					
14. 51	15. 10	12. 59	·0917					
15. 48	27. 20	13. 26	·0901					
16. 45	15. 20	13. 52	·0906					
17. 26	19. 35	14. 7	·0903					
18. 33	17. 10	14. 28	·0906					
18. 40	18. 15	14. 40	·0901					
18. 56	16. 20	15. 7	·0905					
19. 9	17. 0	15. 21	·0901					
19. 15	16. 0	16. 0	·0921					
19. 24	16. 50	17. 2	·0901					
19. 32	15. 20	17. 22	·0896					
19. 40	19. 5	17. 52	·0908					
19. 52	16. 10	18. 0	·0905					
20. 9	13. 30	18. 32	·0909					
20. 37	15. 45		***					
20. 50	14. 30	19. 18	·0903					
21. 17	17. 40	19. 30	·0907					
21. 40	16. 30	19. 43	·0901					
21. 50	23. 0	20. 2	·0900					
	***	20. 12	·0904					
22. 3	19. 30	21. 25	·0883					
22. 9	20. 20	21. 45	·0893					
22. 13	19. 10	21. 54	·0877					
22. 17	21. 0	22. 27	·0875					
22. 22	20. 0	22. 32	·0882					
22. 26	21. 10	22. 45	·0875					
22. 30	19. 0	23. 3	·0879					
22. 43	22. 25		(†)					
22. 47	21. 0							
23. 8	25. 35							
23. 22	23. 30							
23. 40	27. 30							
23. 50	26. 50							
23. 59	28. 0							
Oct. 17		Oct. 17		Oct. 17		Oct. 17		
0. 0	21. 28. 0		(†)	0. 0	·02520	1. 0	62·0	63·0
0. 13	29. 25	1. 0	·0870*	1. 48	·02390	3. 0	63·0	65·0
0. 22	28. 30	2. 10	·0874	6. 45	·01872	9. 0	63·0	64·0
0. 30	30. 40	3. 54	·0877	9. 58	·01926	21. 0	57·0	58·7
0. 56	27. 20	5. 27	·0887	10. 36	·01832			
1. 40	28. 0	5. 45	·0919	10. 47	·01870			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 17		Oct. 17		Oct. 17				
h m	° ′ ″	h m		h m		h m	°	°
2. 0	21. 29. 45	6. 0	·0904	10. 55	·01780			
2. 37	26. 20	7. 58	·0907	11. 29	·01932			
3. 10	26. 0	8. 23	·0891	11. 45	·01870			
3. 26	23. 30	8. 37	·0896	14. 37	·02009			
3. 47	23. 25	8. 44	·0891	15. 4	·01885			
4. 8	21. 0	9. 9	·0924	15. 33	·02007			
5. 30	19. 40	9. 47	·0880	15. 40	·02264			
6. 26	20. 30	10. 30	·0845		***			
7. 21	18. 30	10. 42	·0860	23. 59	·02803			
8. 0	21. 20. 0	10. 46	·0849					
8. 57	20. 47. 50	11. 24	·0902					
9. 48	21. 7. 30	11. 41	·0886					
10. 6	21. 5. 35	11. 45	·0890					
10. 37	20. 55. 25	11. 51	·0881					
11. 9	21. 15. 25	12. 12	·0909					
11. 26	14. 30	12. 39	·0897					
11. 33	18. 50	12. 41	·0919					
11. 42	15. 0	13. 41	·0884					
11. 50	17. 40	14. 2	·0886					
12. 10	13. 0	14. 14	·0873					
12. 26	13. 5	14. 27	·0915					
12. 33	16. 5	14. 36	·0917					
13. 3	13. 0	14. 45	·0907					
13. 47	13. 50	15. 7	·0921					
14. 3	39. 50	15. 17	·0917					
14. 37	11. 35	15. 39	·0926					
14. 50	14. 30	15. 52	·0919					
15. 21	9. 10	16. 2	·0922					
15. 42	7. 40	16. 21	·0919					
16. 13	19. 30	16. 42	·0886					
16. 26	22. 10	16. 46	·0887					
16. 33	26. 20	16. 58	·0882					
16. 51	22. 10	17. 14	·0902					
16. 56	26. 5	17. 39	·0882					
17. 15	19. 20	17. 51	·0884					
17. 24	22. 10	17. 58	·0905					
17. 47	41. 10	18. 4	·0903					
18. 11	33. 30	18. 12	·0907					
18. 20	35. 0	19. 0	·0853					
18. 22	33. 0	19. 29	·0840					
18. 29	35. 5	19. 46	·0855					
18. 50	30. 0	19. 51	·0845					
19. 15	23. 30	20. 2	·0867					
19. 33	28. 40	20. 21	·0849					
19. 47	22. 5	21. 15	·0811					
19. 54	29. 20		***					
20. 13	23. 50	21. 37	·0815					
20. 17	26. 0	21. 43	·0808					
20. 23	24. 0	21. 51	·0813					
20. 38	27. 35	21. 55	·0807					
	***	22. 5	·0813					
20. 54	24. 0	22. 17	·0801					
21. 27	33. 0	22. 30	·0809					
21. 40	29. 45		(†)					
	***							
21. 51	29. 10							
21. 56	32. 5							
	***							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 17								
h m	° ′ ″	h m		h m		h m	°	°
22. 10	21. 29. 5							
22. 15	31. 0							
22. 20	30. 0							
	***							
22. 37	33. 35							
22. 45	31. 30							
22. 48	32. 35							
	(†)							
Oct. 18		Oct. 18		Oct. 18		Oct. 18		
	(†)		(†)	0. 0	·02803	1. 0	58·9	59·7
0. 5	21. 31. 30	1. 0	·0822*	1. 6	·02801	3. 0	60·0	61·0
	***	1. 58	·0891	1. 37	·02863	9. 0	60·5	61·5
0. 47	29. 25	2. 10	·0884	1. 50	·02826	21. 0	58·0	59·0
0. 54	31. 0	2. 20	·0881	2. 4	·02926			
1. 5	32. 10	2. 29	·0884	2. 15	·02918			
1. 30	27. 50	2. 42	·0881	2. 36	·02837			
1. 40	31. 30	2. 52	·0883	5. 3	·02600			
1. 47	27. 10	3. 20	·0878	5. 22	·02721			
2. 0	29. 0	3. 37	·0864	6. 4	·02410			
2. 9	26. 30	4. 5	·0865	7. 7	·02394			
2. 16	30. 0	4. 12	·0871	7. 30	·02330			
2. 22	25. 45	4. 20	·0863	7. 45	·02362			
2. 30	27. 0	4. 30	·0873	7. 56	·02320			
2. 37	24. 25	4. 45	·0851	8. 10	·02363			
2. 47	26. 30	5. 40	·0878	8. 30	·02342			
2. 54	26. 0	5. 54	·0859	8. 50	·02084			
3. 2	28. 10	6. 22	·0846		***			
3. 13	25. 0	6. 45	·0860	9. 45	·02174			
3. 20	26. 5	6. 52	·0851	11. 56	·02163			
3. 28	23. 40	7. 0	·0855	12. 7	·02130			
3. 50	26. 40	7. 15	·0840	12. 20	·02129			
4. 4	22. 30	7. 30	·0861	12. 51	·01960			
4. 20	24. 10	7. 40	·0835	13. 20	·01969			
4. 32	22. 30	8. 5	·0833	13. 50	·02136			
4. 37	24. 30	8. 28	·0863	16. 15	·02162			
4. 48	20. 40	8. 36	·0861	23. 59	·02433			
4. 57	28. 0	8. 50	·0874					
5. 26	7. 50	9. 0	·0871					
5. 33	21. 50	9. 13	·0884					
5. 45	10. 30	9. 24	·0861					
5. 52	17. 35		***					
5. 57	16. 30	9. 51	·0868					
6. 10	25. 30	10. 0	·0853					
6. 20	17. 10	10. 7	·0864					
6. 28	26. 0	10. 45	·0855					
6. 34	21. 0	11. 42	·0855					
6. 54	13. 0	11. 55	·0835					
6. 58	17. 30	12. 10	·0843					
7. 6	15. 5	12. 22	·0824					
7. 10	15. 30	12. 30	·0837					
7. 18	14. 30	12. 42	·0832					
7. 26	20. 0	12. 55	·0839					
7. 47	15. 30	13. 6	·0830					
7. 58	23. 0	13. 44	·0875					
8. 9	15. 20	13. 52	·0871					
8. 24	17. 35	14. 21	·0880					
8. 36	3. 35	14. 47	·0874					
9. 6	28. 40	15. 13	·0882					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 18		Oct. 18						
h m	° ′ ″	h m		h m		h m	°	°
9. 13	21. 15. 20	15. 40	·0869					
9. 22	28. 50	15. 52	·0871					
9. 33	7. 10	16. 14	·0867					
9. 40	20. 15	16. 37	·0873					
9. 53	11. 30	16. 45	·0869					
10. 2	13. 0	17. 17	·0876					
10. 7	10. 25	18. 10	·0864					
10. 15	13. 0	18. 28	·0866					
10. 21	5. 5	18. 42	·0861					
10. 40	10. 0	19. 13	·0867					
10. 53	5. 10	19. 20	·0860					
11. 20	7. 30	19. 51	·0866					
11. 51	7. 45	21. 51	·0849					
12. 0	6. 30	22. 10	·0849					
12. 28	24. 30	22. 19	·0842					
12. 43	25. 20	22. 50	·0847					
13. 30	4. 45	23. 7	·0833					
13. 48	10. 0	23. 22	·0834					
14. 0	8. 30	23. 59	·0843					
14. 8	9. 25							
14. 10	8. 50							
14. 27	11. 30							
14. 52	10. 30							
15. 33	17. 20							
15. 40	17. 30							
15. 50	15. 35							
16. 10	16. 45							
16. 22	15. 0							
16. 40	17. 50							
17. 4	17. 0							
17. 43	21. 10							
17. 58	21. 30							
18. 26	20. 0							
18. 37	21. 20							
18. 56	19. 0							
19. 13	19. 50							
19. 20	21. 30							
19. 33	19. 20							
19. 45	21. 0							
19. 51	17. 10							
19. 53	20. 35							
	***							
20. 24	17. 30							
20. 56	18. 0							
21. 37	16. 50							
21. 52	17. 0							
22. 10	20. 30							
22. 27	20. 25							
22. 50	25. 0							
23. 0	24. 5							
23. 15	26. 0							
23. 30	28. 0							
	***							
23. 59	26. 30							
Oct. 19		Oct. 19		Oct. 19		Oct. 19		
0. 0	21. 26. 30	0. 0	·0843	0. 0	·02433	1. 0	60·0	61·0
	***	1. 5	·0847	3. 6	·02347	3. 0	61·0	62·0
0. 50	27. 30	1. 52	·0862	3. 28	·02384	9. 0	61·7	63·2

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 19		Oct. 19		Oct. 19		Oct. 19		
h m	° ′ ″	h m		h m		h m	°	°
1. 10	21. 26. 25	2. 55	·0863	7. 30	·01942	21. 0	54 ·7	56 ·0
1. 52	29. 5	3. 21	·0896	9. 0	{ ·01887			
2. 20	27. 5	3. 40	·0874		·02064			
2. 50	29. 0	4. 10	·0873	15. 2:	·02066			
3. 15	16. 30	4. 41	·0881	21. 45	·02721			
3. 40	20. 30	4. 58	·0879	23. 59	·02809			
	***	6. 12	·0884					
5. 0	19. 30	6. 21	·0881					
5. 40	12. 30	6. 35	·0886					
5. 51	13. 0	7. 22	·0881					
6. 4	11. 50	7. 50	·0892					
6. 20	14. 0	7. 54	·0885					
6. 26	13. 10	8. 9	·0896					
7. 0	17. 15	8. 32	·0876					
7. 15	16. 30	9. 10	·0890					
7. 43	16. 50	9. 24	·0885					
7. 56	14. 0	10. 56	·0887					
8. 8	10. 15	11. 23	·0883					
8. 30	18. 0	12. 0	·0887					
8. 45	14. 5	12. 36	·0885					
9. 20	15. 40	13. 36	·0893					
10. 8	14. 10	13. 46	·0887					
10. 45	11. 35	13. 57	·0894					
	***	14. 40	·0894					
12. 15	13. 30	14. 52	·0897					
12. 37	12. 35	15. 22	·0893					
12. 50	14. 30	15. 45	·0898					
13. 0	13. 20	16. 55	·0897					
13. 20	14. 0	17. 15	·0901					
13. 45	15. 30	17. 45	·0901					
14. 0	15. 30	17. 54	·0896					
14. 20	20. 0	19. 6	·0899					
14. 52	17. 50	19. 30	·0896					
15. 3	19. 10	20. 7	·0899					
	***	22. 12	·0873					
15. 37	18. 30	22. 43	·0871					
16. 0	19. 50	23. 23	·0882					
16. 40	18. 30	23. 30	·0878					
	***	23. 40	·0885					
18. 30	19. 20	23. 47	·0880					
19. 10	21. 45	23. 51	·0883					
	***	23. 54	·0880					
20. 20	19. 50	23. 59	·0887					
	***							
21. 40	22. 50							
23. 0	30. 30							
	***							
23. 59	30. 0							
Oct. 20		Oct. 20		Oct. 20		Oct. 20		
0. 0	21. 30. 0	0. 0	·0888	0. 0	·02809	1. 0	57 ·5	58 ·0
	***	0. 10	·0892	2. 0	·02850	3. 0	59 ·7	61 ·0
0. 28	30. 20	0. 30	·0900	5. 56:	·02122	9. 0	59 ·6	60 ·4
0. 40	28. 0	0. 39	·0895	9. 40	{ ·01960	21. 0	50 ·0	52 ·0
0. 56	34. 5	0. 51	·0905		·02558			
1. 7	33. 10	1. 11	·0891	12. 10	·02521			
1. 30	34. 30	1. 28	·0892	12. 40	·02460			
1. 37	37. 50	1. 42	·0899	14. 15	·02609			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 20		Oct. 20		Oct. 20				
h m	° ′ ″	h m		h m		h m	°	°
1. 54	21. 29. 30	1. 46	·0896	21. 52	·02810			
2. 10	35. 0	2. 2	·0909	23. 59	·02821			
2. 30	26. 30	2. 25	·0873					
2. 56	32. 25	3. 0	·0887					
3. 6	30. 10	3. 12	·0878					
	***	3. 49	·0855					
3. 28	31. 20	4. 15	·0870					
3. 47	25. 30	4. 36	·0881					
4. 10	27. 20	4. 51	·0871					
	***	5. 9	·0866					
4. 50	25. 5	5. 21	·0873					
5. 6	19. 30	5. 47	·0869					
5. 28	19. 40	6. 17	·0880					
5. 56	16. 30	7. 12	·0869					
6. 38	19. 0	7. 28	·0875					
6. 56	16. 35	7. 42	·0869					
7. 28	19. 0	7. 49	·0871					
7. 40	17. 30	8. 0	·0864					
7. 47	19. 5	8. 22	·0871					
8. 7	16. 30	8. 46	·0871					
8. 36	17. 30	9. 14	·0891					
9. 2	11. 0	9. 29	·0880					
9. 15	16. 35	9. 51	·0942					
9. 33	9. 30	10. 0	·0902					
9. 47	30. 20	10. 11	·0904					
10. 52	7. 30	10. 18	·0891					
11. 8	11. 35	10. 24	·0895					
11. 40	9. 0	10. 44	·0861					
11. 52	11. 20	10. 59	·0881					
12. 3	16. 30	11. 13	·0868					
12. 20	19. 0	11. 54	·0867					
12. 38	12. 30	12. 21	·0889					
13. 6	15. 10	12. 28	·0884					
13. 24	17. 0	12. 45	·0890					
13. 51	9. 20	13. 7	·0888					
14. 10	13. 30	13. 15	·0891					
14. 32	11. 0	13. 42	·0877					
15. 8	17. 30	14. 6	·0902					
	***	14. 42	·0887					
15. 37	16. 35	15. 30	·0874					
16. 4	20. 25	15. 54	·0878					
16. 7	18. 10	16. 1	·0875					
16. 20	21. 5	16. 12	·0881					
16. 43	17. 30	16. 29	·0881					
17. 9	20. 45	16. 40	·0890					
17. 30	18. 25	17. 14	·0882					
	***	17. 43	·0891					
18. 3	21. 40	17. 51	·0886					
18. 9	24. 15	18. 7	·0887					
18. 14	22. 10	18. 18	·0878					
18. 20	22. 35		***					
18. 36	18. 20	19. 24	·0875					
	***	20. 2	·0884					
19. 43	23. 30	21. 0	·0864					
19. 56	19. 25	21. 30	·0861					
20. 50	16. 40	21. 43	·0868					
21. 22	19. 35	23. 36	·0867					
	***	23. 45	·0850					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 20		Oct. 20						
h m	° ′ ″	h m		h m		h m	°	°
23.15	21.21.10	23.52	·0866					
23.32	24.15	23.59	·0849					
23.43	22. 0							
23.48	24. 5							
23.59	18.10							
Oct. 21		Oct. 21		Oct. 21		Oct. 21		
0. 0	21.18.10	0. 0	·0849	0. 0	·02821	1. 0	52·0	53·0
0.17	24.30	0.30	·0881	1.57	·03032	3. 0	53·0	54·0
0.38	24.25	0.51	·0851	2.20	·02930	9. 0	50·0	52·0
0.50	28.35	1. 0	·0864	3.22	·02991	21. 0	42·0	45·0
	***	1. 5	·0860	4.50	·02690			
1. 5	28.35	1.11	·0868	5.36	·02691			
1.13	31. 0	1.13	·0863	5.51	·02803			
1.25	38.20	1.40	·0905	6.15	·02640			
1.44	38.50	1.44	·0901	9. 7	·02553			
1.53	31.35	1.57	·0918	11.40	·02603			
2. 2	34.20	2.11	·0894	17.18	·02849			
2. 9	27.25	2.22	·0913	23.59	·02887			
2.26	33.50	2.44	·0865					
2.35	29.15	2.52	·0884					
2.47	43.30	3.10	·0858					
3. 4	27.25	3.29	·0887					
3.20	35. 5	3.35	·0884					
3.26	28.15	3.40	·0891					
3.41	34. 0	3.56	·0858					
3.57	27.40	4. 6	·0866					
4. 6	28.35	4.24	·0844					
4.20	26.30	4.44	·0859					
5. 3	23.15	4.51	·0851					
5. 8	24. 5	5.17	·0879					
5.20	21.30	5.45	·0905					
5.27	24.20	5.51	·0885					
5.34	21.10	5.59	·0906					
5.48	5.20	6.15	·0870					
6.10	25.45	6.22	·0882					
6.18	15.15		***					
6.29	21.10	6.45	·0877					
6.47	24. 5	6.51	·0867					
6.51	20.15	6.59	·0895					
7. 2	22.10	7.10	·0886					
7.20	19.20	7.29	·0887					
7.37	16.35	7.45	·0903					
7.46	20.20	7.52	·0897					
8.25	19.30	8.39	·0910					
8.52	22. 0	9. 3	·0897					
9.19	10. 5	9.17	·0917					
9.37	22. 0	9.33	·0893					
9.45	16. 5	10.42	·0901					
9.53	13.25	11.26	·0885					
10.15	17.50	12.10	·0904					
	***	12.15	·0898					
10.39	16.30	12.25	·0904					
10.48	18.25	12.36	·0892					
11. 5	15.40	12.46	·0901					
	***	13.11	·0892					
12.30	18. 0	13.19	·0897					
12.36	20.10	13.52	·0878					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 21		Oct. 21						
h m	° ′ ″	h m		h m		h m	°	°
12.45	21.14.25	14.21	·0897					
12.57	18. 5	14.43	·0889					
13.51	13.30	15.46	·0895					
14.16	17.20	16. 8	·0908					
14.45	13.45	16.24	·0903					
15.15	17.40	16.40	·0906					
16. 0	13.25	16.57	·0899					
16.12	16.30	17.43	·0895					
16.26	15. 5	19.13	·0905					
16.47	17. 0	20.13	·0898					
16.55	16. 5	20.45	·0898					
17.23	17.40	21.53	·0882					
17.51	21.35	22.51	·0886					
18.38	18.20	23.59	·0891					
18.45	18.30							
18.51	17. 5							
18.59	19. 0							
19. 3	17.15							
19.12	18.40							
19.20	17.10							
	***							
20. 0	19.25							
20. 6	17.40							
20.27	18.35							
20.35	17.30							
21. 3	19.25							
21.20	19. 0							
22.11	24.15							
23. 5	26.30							
23.59	26.25							
Oct. 22		Oct. 22		Oct. 22		Oct. 22		
0. 0	21.26.25	0. 0	·0891	0. 0	·02887	1. 0	47·0	48·0
0.47	25.35	0.14	·0895	2.26	·02738	3. 0	49·8	51·0
1.16	33.50	0.34	·0892	7.10	·01950	9. 0	52·0	53·0
2. 5	26.20	1.12	·0901	11.36	·01991	21.20	44·0	46·4
2.20	28. 0	1.44	·0890	16. 9	·02132			
2.36	26.45	2. 3	·0889	23.59	·02657			
2.43	28.30	2.34	·0901					
3.25	26. 0	2.50	·0897					
3.47	25.55	4.24	·0898					
3.51	28. 5	4.54	·0906					
4.38	27.50	9.36	·0913					
4.50	25.20	9.52	·0923					
5. 9	24. 0	10.12	·0919					
5.30	19.25	10.29	·0925					
7. 0	16.30	10.41	·0921					
8.40	16.10	10.53	0925					
9.36	18. 5	11.14	·0911					
9.50	16.50	11.30	·0916					
10. 8	18. 0	12.15	·0910					
10.21	15.35	12.44	·0915					
10.40	15.45	13.13	·0913					
10.52	12.10	19. 5	·0928					
11.13	17. 5	22. 0	·0907					
11.37	12.30	23.59	·0903					
12. 5	13.15							
13. 6	17.20							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 22								
h m	° ′ ″	h m		h m		h m	°	°
15. 10	21. 16. 20							
15. 45	16. 25							
16. 15	16. 20							
16. 50	17. 0							
	***							
20. 58	13. 10							
23. 59	25. 5							
Oct. 23		Oct. 23		Oct. 23		Oct. 23		
0. 0	21. 25. 5	0. 0	·0903	0. 0	·02657	6. 32	44 ·7	47 ·[illegible]
2. 2	27. 35	2. 6	·0923	3. 47	·02770	21. 0	39 ·5	42 ·8
2. 21	26. 30	2. 44	·0920	11. 48	·02621			
2. 36	27. 35	4. 40	·0936	19. 0	·02956			
2. 53	24. 20	5. 52	·0935	23. 59	·02928			
5. 27	17. 15	6. 12	·0941					
6. 20	17. 40	6. 31	·0934					
6. 44	16. 45	7. 11	·0941					
7. 15	17. 35	8. 14	·0939					
7. 53	16. 0	8. 54	·0947					
8. 22	17. 20	10. 30	·0942					
8. 43	16. 20	18. 5	·0947					
9. 9	17. 30	22. 30	·0917					
11. 20	19. 35	22. 56	·0916					
18. 43	16. 25	23. 59	·0925					
20. 46	12. 35							
23. 59	22. 30							
Oct. 24		Oct. 24		Oct. 24		Oct. 24		
0. 0	21. 22. 30	0. 0	·0925	0. 0	·02928	1. 0	42 ·0	44 ·0
1. 37	23. 5	0. 28	·0929	13. 15:	·02261	3. 0	43 ·3	46 ·0
4. 36	19. 10	0. 54	·0927	23. 59	·02790	9. 0	44 ·5	47 ·5
7. 43	17. 35	3. 40	·0939			21. 0	39 ·0	42 ·5
9. 45	18. 0	9. 22	·0948					
10. 13	17. 20	11. 2	·0947					
11. 46	18. 5	16. 10	·0953					
18. 39	16. 20	18. 13	·0955					
21. 5	13. 0	23. 0	·0921					
23. 13	22. 25	23. 59	·0928					
23. 59	23. 25							
Oct. 25		Oct. 25		Oct. 25		Oct. 25		
0. 0	21. 23. 25	0. 0	·0928	0. 0	·02790	1. 0	43 ·0	44 ·8
4. 7	18. 30	2. 7	·0931	1. 54	·02732	3. 0	46 ·0	47 ·5
4. 45	19. 25	4. 9	·0934	6. 47:	·02106	9. 0	50 ·0	51 ·0
10. 27	17. 30	4. 29	·0938	10. 43	·01950	21. 0	50 ·0	50 ·8
11. 8	15. 35	4. 53	·0935	23. 59	·01969			
12. 6	17. 40	5. 30	·0941					
12. 27	15. 30	6. 21	·0940					
13. 15	17. 30		***					
16. 8	18. 5	10. 30	·0945					
	***	11. 55	·0937					
20. 15	13. 35	12. 17	·0943					
21. 27	15. 25	12. 52	·0939					
23. 59	28. 10	18. 39	·0943					
		20. 10	·0932					
		22. 18	·0903					
		23. 59	·0909					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 26		Oct. 26		Oct. 26		Oct. 26		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 28. 1[illegible]	0. 0	·0909	0. 0	·01969	1. 0	51 ·[illegible]	51 ·[illegible]
	***	0. 2[illegible]	·0905	1. 37	·02[illegible] ·01972	3. 0	51 ·8	52 ·0
0. 58	27. 35	1. 39	·0903	5. 13	·02[illegible]12 ·023[illegible]7	9. 0	5[illegible]	5[illegible]·2
	***	6. 15	·0926	11. 15	·02237	21. 0	4[illegible]	4[illegible]
3. 13	21. 5	10. 51	·09[illegible]0	23. 59	·02923			
6. 15	17. 30	18. 51	·0947					
18. 40	16. 25	22. 13	·09[illegible]					
21. 11	14. 10	23. 59	·0919					
23. 59	22. 50							
Oct. 27		Oct. 27		Oct. 27		Oct. 27		
0. 0	21. 22. 50	0. 0	·0919	0. 0	·02923	1. 0	44 ·[illegible]	46 ·[illegible]
1. 37	22. 45	0. 48	·0931	3. 4	·02[illegible]42	3. 0	46 ·0	47 ·5
4. 4	19. 30	2. 5	·0935	8. 22	·02664	9. 0	47 ·3	4[illegible]
	***	2. 40	·0941	13. 2[illegible]	·02639	21. 0	44 ·[illegible]	46 ·0
6. 57	19. 40	3. 13	·0935	23. 6	·02942			
7. 9	15. 10	3. 56	·0936	23. 59	·02928			
7. 40	17. 30	4. 28	·0944					
8. 0	16. 15	4. 52	·0940					
8. 21	18. 25	5. 52	·0950					
9. 10	15. 30	6. 26	·0942					
	***	7. 15	·0956					
11. 11	17. 0	8. 24	·0954					
11. 54	20. 45	12. 30	·0950					
12. 20	18. 30	13. 41	·0947					
12. 32	19. 25	15. 28	·0953					
19. 15	16. 20	18. 52	·0951					
20. 58	14. 10	21. 0	·0942					
22. 50	18. 40	22. 52	·0924					
	***	23. 38	·0920					
23. 59	23. 30	23. 59	·0922					
Oct. 28		Oct. 28		Oct. 28		Oct. 28		
0. 0	21. 23. 30	0. 0	·0922	0. 0	·02928	1. 0	48 ·0	4[illegible] ·0
0. 55	23. 30	0. 52	·0931	0. 34	·02893	3. 0	51 ·0	52 ·0
	***	4. 44	·0925		(†)	9. 0	54 ·0	54 ·0
6. 26	18. 20	4. 53	·0933	1. 0	·02865*	21. 0	50 ·5	52 ·0
9. 10	17. 10	9. 15	·0937	3. 0	·02696*			
	***	9. 43	·0933	4. 36	·02490			
10. 20	11. 45	10. 28	·0945	9. 17	·02037			
11. 56	15. 30	10. 42	·0940	12. 30	·02050 ·02256			
12. 29	14. 30	11. 7	·0946	17. 36	·02121			
13. 22	17. 10	12. 7	·0931	23. 59	·02369			
15. 3	17. 20	12. 24	·0935					
15. 37	20. 30	12. 59	·0931					
16. 2	19. 30	15. 42	·0931					
16. 28	20. 25	17. 51	·0946					
17. 4	16. 5	18. 24	·0935					
17. 56	16. 10	19. 52	·0940					
18. 42	19. 30	20. 21	·0929					
	***	20. 29	·0931					
20. 3	14. 35	21. 7	·0921					
20. 15	16. 35		***					
20. 30	14. 25	23. 15	·0907					
20. 45	17. 30	23. 59	·0885					
	***							
21. 9	16. 0							
21. 55	18. 35							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 28								
h m	° ′ ″	h m		h m		h m	°	°
22. 20	21. 18. 0							
	***							
23. 59	28. 0							
Oct. 29		Oct. 29		Oct. 29		Oct. 29		
0. 0	21. 28. 5	0. 0	·0885	0. 0	·02369	1. 0	52 ·0	53 ·0
0. 15	29. 0	0. 19	·0894	2. 37	·02361	3. 0	53 ·5	54 ·0
0. 29	27. 10	0. 29	·0892	5. 22	{ ·02122	9. 0	52 ·2	53 ·2
0. 43	30. 50	1. 52	·0906		·02443	22. 25	46 ·0	47 ·5
0. 52	26. 30	2. 12	·0899	8. 58	·02290			
1. 53	29. 0	2. 47	·0888	12. 47	·02400			
2. 10	28. 5	3. 21	·0908	23. 59	·03007			
2. 42	23. 10	3. 55	·0906					
2. 52	21. 25	4. 12	·0910					
3. 10	23. 0	4. 25	·0905					
3. 37	23. 10	5. 20	·0914					
4. 10	21. 50	5. 51	·0914					
5. 6	19. 0	6. 11	·0904					
5. 37	18. 5	6. 30	·0905					
5. 54	19. 35	6. 45	·0910					
6. 40	14. 25	6. 57	·0909					
7. 6	16. 30	7. 45	·0915					
7. 22	15. 25	8. 10	·0930					
7. 40	15. 30	8. 30	·0911					
7. 52	11. 20	8. 43	·0918					
8. 10	14. 30	9. 10	·0901					
8. 26	14. 50	9. 40	·0911					
8. 40	11. 30	10. 24	·0910					
9. 20	9. 25	10. 49	·0913					
9. 45	12. 5	11. 5	·0921					
10. 3	11. 45	11. 29	·0911					
10. 40	15. 0	12. 7	·0912					
10. 57	11. 35	12. 30	·0924					
11. 33	9. 0	13. 20	·0921					
12. 27	15. 30	16. 7	·0931					
13. 23	19. 40	17. 39	·0932					
15. 2	17. 35	18. 21	·0934					
15. 45	18. 0	18. 50	·0939					
16. 40	16. 30	21. 5	·0925					
17. 3	17. 30	22. 10	·0907					
19. 20	16. 20	23. 59	·0915					
19. 58	14. 30							
20. 9	13. 0							
20. 20	14. 10							
	***							
20. 50	13. 10							
21. 0	15. 10							
	***							
21. 56	17. 25							
22. 45	21. 30							
23. 0	21. 0							
23. 26	22. 50							
23. 42	21. 45							
23. 59	23. 40							
Oct. 30		Oct. 30		Oct. 30		Oct. 30		
0. 0	21. 23. 40	0. 0	·0915	0. 0	·03007	8. 30	49 ·5	51 ·0
0. 15	23. 20	2. 45	·0929	2. 53	·03009	21. 0	49 ·0	51 ·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 30		Oct. 30		Oct. 30				
h m	° ′ ″	h m		h m		h m	°	°
0. 25	21. 26. 0	3. 7	·0924	15. 8	·02726			
0. 37	24. 45	3. 54	·0929	23. 59	·02710			
0. 40	25. 30	4. 10	·0928					
1. 0	24. 0	4. 43	·0936					
1. 40	23. 5	5. 11	·0933					
1. 50	24. 30	5. 36	·0923					
2. 4	23. 0	5. 51	·0927					
2. 40	23. 15	6. 7	·0921					
3. 4	20. 30	6. 43	·0933					
5. 8	18. 20	7. 55	·0936					
5. 50	18. 35	8. 54	·0931					
6. 20	13. 20	9. 10	·0937					
7. 4	18. 40	9. 17	·0936					
8. 50	17. 20	9. 37	·0948					
9. 20	15. 45	9. 48	·0941					
9. 40	17. 50	10. 0	·0945					
9. 53	16. 30	10. 42	·0935					
10. 30	17. 0	15. 40	·0932					
10. 45	15. 50	17. 10	·0941					
11. 53	15. 25	19. 55	·0933					
12. 30	17. 10	20. 54	·0919					
13. 4	16. 20	22. 7	·0903					
13. 37	17. 25	22. 55	·0897					
14. 28	16. 0	23. 51	·0901					
15. 3	18. 5		(†)					
15. 18	17. 30							
15. 52	20. 25							
17. 3	17. 0							
19. 4	16. 40							
19. 43	15. 0							
	***							
21. 40	15. 30							
22. 20	19. 0							
22. 27	18. 5							
23. 20	21. 40							
23. 40	21. 30							
23. 59	25. 30							
Oct. 31		Oct. 31		Oct. 31		Oct. 31		
0. 0	21. 25. 30		(†)	0. 0	·02710	1. 0	52 ·0	52 ·7
0. 38	27. 35	1. 0	·0904*	3. 26	·02442	3. 0	54 ·0	54 ·8
1. 20	24. 10	1. 34	·0904	6. 57	·02113	9. 0	54 ·0	55 ·0
1. 29	24. 35	2. 12	·0913	7. 5	{ ·02150	21. 0	53 ·5	54 ·0
1. 40	24. 0	2. 22	·0908		·02372			
2. 2	25. 30	2. 30	·0912	9. 13	·02363			
	***	3. 0	·0907	10. 56	·02397			
3. 7	22. 0	3. 40	·0910	16. 10	·02256			
3. 40	23. 0	4. 7	·0905	23. 59	·02160			
4. 50	16. 30	4. 40	·0913					
	***	5. 5	·0910					
6. 48	19. 30	6. 44	·0922					
7. 6	17. 10	6. 57	·0907					
	***	7. 10	·0909					
8. 4	14. 30	7. 30	·0896					
8. 47	17. 25	8. 10	·0913					
9. 33	15. 50	9. 15	·0930					
9. 50	11. 0	9. 30	·0920					
10. 30	14. 5	9. 43	·0926					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 31		Oct. 31						
h m	° ′ ″	h m		h m		h m	°	°
10. 53	21. 17. 40	10. 28	·0925					
11. 26	11. 5	10. 52	·0946					
11. 45	11. 35	11. 15	·0925					
	***	11. 28	·0928					
12. 13	11. 30	11. 52	·0918					
12. 37	8. 50	11. 57	·0924					
12. 43	9. 45	12. 45	·0912					
12. 50	9. 0	13. 13	·0898					
13. 13	13. 0	13. 38	·0912					
14. 6	5. 40	13. 40	·0909					
15. 15	17. 10	14. 29	·0915					
15. 36	15. 10	14. 46	·0909					
15. 50	17. 20	18. 25	·0911					
	***	20. 0	·0900					
20. 28	15. 5	22. 26	·0888					
	***	23. 16	·0900					
23. 59	22. 30	23. 59	·0891					
Nov. 1		Nov. 1		Nov. 1		Nov. 1		
0. 0	21. 22. 30	0. 0	·0891	0. 0	·02160	1. 0	56·0	56·8
2. 10	21. 25	0. 43	·0884	1. 7	·02130 ·02322	3. 0	57·8	58·5
6. 13	17. 35	2. 10	·0894			9. 0	59·0	58·5
	***	11. 0	·0908	4. 50	·02119	21. 0	53·0	55·0
15. 13	17. 5	15. 20	·0917	13. 36	·02111			
15. 40	15. 0	15. 39	·0922	23. 59	·02437			
16. 11	16. 10	18. 19	·0923					
17. 3	15. 40	22. 44	·0900					
17. 58	17. 40	23. 59	·0900					
20. 57	16. 25							
23. 59	24. 20							
Nov. 2		Nov. 2		Nov. 2		Nov. 2		
0. 0	21. 24. 20	0. 0	·0900	0. 0	·02437	1. 0	55·5	56·3
3. 40	18. 35	2. 15	·0910	1. 27	·02436	3. 0	58·0	59·0
5. 57	18. 10	3. 45	·0903	5. 0	·02031 ·02142	9. 0	57·0	57·0
6. 28	16. 30	4. 22	·0913			21. 0	51·0	53·0
7. 2	18. 20	5. 10	·0907	6. 28	·02069			
7. 58	18. 0	5. 51	·0911	9. 40	·02111			
8. 22	14. 15	6. 20	·0906	18. 46	·02429			
8. 37	13. 5	7. 51	·0920	22. 56	·02671			
9. 33	17. 30	8. 17	·0930	23. 59	·02760			
11. 40	17. 35	8. 30	·0924					
12. 10	18. 5	9. 11	·0917					
14. 15	17. 15	13. 55	·0922					
15. 16	19. 15	18. 10	·0932					
18. 20	17. 50	21. 28	·0916					
	***	22. 54	·0926					
20. 18	14. 30	23. 59	·0915					
21. 52	18. 0							
22. 21	17. 15							
22. 27	11. 30							
23. 18	16. 20							
23. 59	15. 20							
Nov. 3		Nov. 3		Nov. 3		Nov. 3		
0. 0	21. 15. 20	0. 0	·0915	0. 0	·02760	1. 0	55·0	56·0
0. 10	21. 15	0. 12	·0910	2. 15	·02522	3. 0	57·5	58·3
0. 50	20. 20	1. 25	·0918	6. 6	·02003	9. 0	56·3	57·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 3		Nov. 3		Nov. 3		Nov. 3		
h m	° ′ ″	h m		h m		h m	°	°
1. 26	21. 24. 0	2. 15	·0902	6. 47	·02241 ·02218	21. 0	53·0	54·7
2. 0	23. 20	5. 15	·0919					
2. 33	20. 10	5. 45	·0930	10. 36	·02141			
2. 50	21. 5	6. 39	·0911	19. 20	·02577			
5. 27	19. 5	6. 45	·0916	23. 59	·02669			
6. 23	21. 50	6. 55	·0896					
7. 4	6. 30	7. 21	·0907					
7. 18	10. 10	7. 30	·0897					
7. 26	8. 0	7. 39	·0904					
8. 4	15. 50	7. 51	·0894					
8. 20	15. 10	8. 3	·0900					
8. 37	16. 45	8. 10	·0897					
12. 0	16. 0	8. 30	·0913					
15. 28	17. 45	8. 43	·0912					
18. 54	16. 30	8. 50	·0920					
20. 20	14. 30	9. 21	·0921					
21. 26	15. 25	9. 44	·0914					
21. 32	13. 20	10. 40	·0923					
21. 40	16. 0	13. 44	·0922					
21. 50	15. 5	14. 10	·0930					
23. 59	20. 35	19. 30	·0935					
		21. 58	·0914					
		23. 59	·0909					
Nov. 4		Nov. 4		Nov. 4		Nov. 4		
0. 0	21. 20. 35	0. 0	·0909	0. 0	·02669	1. 0	54·5	55·3
1. 30	22. 30	0. 55	·0905	1. 36	·02672	3. 0	57·0	57·7
2. 39	20. 50	10. 10	·0927	8. 30	·02197	9. 0	[illegible]	59·0
2. 50	21. 45		***	14. 45	·02159	21. 0	53·0	55·0
3. 10	20. 0	19. 28	·0932	18. 54	·02197			
17. 40	18. 0	22. 18	·0903	23. 44	·02498			
	***	23. 59	·0904		(†)			
20. 42	14. 30							
	***							
23. 36	22. 30							
23. 49	22. 10							
	(†)							
Nov. 5		Nov. 5		Nov. 5		Nov. 5		
	(†)	0. 0	·0904		(†)	1. 0	56·0	56·0
0. 15	21. 22. 50	2. 12	·0908	0. 51	·02571	3. 0	58·0	57·7
1. 22	23. 0	4. 11	·0919	5. 3	·02294	9. 0	58·0	58·0
2. 58	20. 50	4. 28	·0914	8. 58	·02339	22. 38	57·0	59·0
4. 11	21. 20	5. 45	·0926	17. 33	·02231			
4. 50	18. 10	6. 14	·0922	21. 8	·02296			
6. 0	20. 0	8. 58	·0926	23. 59	·02290			
8. 51	18. 35	9. 15	·0931					
9. 15	15. 40	9. 37	·0924					
9. 26	17. 0	18. 6	·0933					
10. 40	17. 40	20. 12	·0926					
18. 51	16. 30	20. 53	·0910					
20. 11	15. 0	21. 45	·0913					
21. 29	17. 25	22. 11	·0909					
22. 30	23. 30	23. 24	·0911					
23. 14	24. 40	23. 30	·0919					
23. 23	28. 10	23. 53	·0904					
23. 49	23. 15	23. 59	·0904					
23. 59	25. 5							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Nov. 6	
h m	° ′ ″
0. 0	21. 25. 5
0. 15	28. 0
0. 39	24. 25
0. 54	28. 50
1. 0	27. 0
1. 11	28. 55
1. 44	22. 20
	***
2. 12	23. 30
2. 21	25. 0
	***
3. 30	19. 30
3. 42	20. 30
3. 56	19. 0
5. 12	18. 15
5. 39	21. 0
6. 21	17. 45
6. 40	19. 30
7. 17	20. 30
7. 43	19. 0
8. 19	18. 30
9. 40	14. 15
10. 13	16. 50
12. 21	18. 30
12. 32	17. 15
13. 12	18. 35
13. 40	23. 45
14. 6	18. 45
14. 45	15. 50
15. 8	16. 50
15. 40	14. 15
16. 52	15. 15
17. 7	16. 30
17. 43	16. 5
17. 58	18. 20
18. 37	18. 30
19. 11	16. 0
19. 40	17. 40
20. 13	14. 35
	***
21. 39	16. 40
22. 45	21. 50
23. 11	27. 0
	***
23. 53	28. 15
	(†)
Nov. 7	
	(†)
0. 30	21. 28. 0
0. 45	29. 0
0. 52	28. 10
1. 0	30. 30
1. 7	28. 50
	***
1. 50	30. 25
2. 2	28. 0
2. 36	26. 50

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Nov. 6	
h m	
0. 0	·0904
0. 23	·0912
0. 42	·0905
1. 16	·0916
1. 44	·0907
2. 21	·0915
3. 29	·0911
3. 43	·0916
4. 17	·0917
5. 21	·0931
5. 45	·0912
7. 0	·0923
7. 30	·0914
8. 17	·0920
8. 48	·0917
9. 9	·0924
9. 23	·0922
9. 45	·0927
10. 21	·0923
13. 20	·0928
13. 57	·0941
14. 26	·0931
14. 55	·0926
16. 58	·0934
18. 7	·0927
19. 1	·0933
19. 51	·0925
20. 29	·0924
21. 28	·0905
22. 30	·0898
22. 56	·0905
23. 16	·0899
23. 59	·0906
Nov. 7	
0. 0	·0906
0. 25	·0900
0. 37	·0888
1. 22	·0898
2. 47	·0888
3. 1	·0912
3. 23	·0913
3. 45	·0900
4. 24	·0915
4. 56	·0918

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Nov. 6	
h m	
0. 0	·02290
1. 17	·02297
5. 48	·02100
7. 50	·02101
18. 0	·02297
20. 52	·02322
23. 59	·02268
Nov. 7	
0. 0	·02268
1. 46	·02246
3. 48	·02078
5. 48	{ ·02080 ·02257
9. 53	·02227
12. 7	·02261
14. 18	·02264
23. 4	·02687
23. 59	·02690

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
Nov. 6		
h m	°	°
8. 22	58·0	58·2
21. 0	56·3	57·5
Nov. 7		
1. 0	58·0	58·0
3. 0	59·0	59·0
9. 0	57·0	58·0
21. 0	51·4	53·2

Greenwich Mean Solar Time.	Western Declination.
Nov. 7	
h m	° ′ ″
3. 0	21. 24. 30
3. 40	27. 10
4. 20	23. 5
5. 4	22. 0
5. 58	18. 55
8. 3	20. 5
10. 29	17. 10
11. 39	17. 0
11. 50	18. 5
12. 10	18. 15
12. 39	22. 0
12. 58	22. 30
13. 26	19. 5
15. 10	19. 30
15. 20	18. 0
	***
17. 15	21. 40
17. 56	19. 30
18. 28	22. 25
	***
20. 15	18. 30
20. 47	15. 30
21. 9	17. 10
	***
21. 30	16. 0
21. 54	22. 50
22. 0	20. 0
22. 3	23. 5
22. 7	21. 0
	***
22. 34	23. 35
22. 37	27. 0
22. 45	25. 20
22. 50	28. 50
22. 54	24. 10
23. 0	27. 50
23. 4	25. 50
23. 10	28. 0
23. 22	27. 30
23. 52	26. 30
23. 59	27. 35
Nov. 8	
0. 0	21. 27. 35
	***
0. 37	29. 30
0. 50	27. 5
1. 4	26. 10
1. 20	29. 0
	***
1. 42	29. 0
	***
2. 33	21. 5
3. 4	26. 30
3. 26	25. 20
3. 53	26. 30
4. 17	24. 0
4. 28	19. 25

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Nov. 7	
h m	
5. 29	·0913
6. 13	·0921
8. 26	·0925
8. 45	·0923
9. 27	·0932
10. 10	·0926
10. 28	·0931
10. 40	·0929
10. 54	·0933
11. 22	·0927
12. 9	·0930
12. 19	·0934
12. 52	·0931
13. 24	·0945
14. 28	·0936
16. 28	·0937
17. 43	·0944
18. 28	·0942
19. 5	·0947
21. 36	·0915
21. 52	·0915
22. 15	·0905
	***
23. 11	·0903
23. 19	·0905
23. 28	·0901
23. 40	·0905
23. 45	·0896
23. 59	·0903
Nov. 8	
0. 0	·0904
0. 13	·0907
0. 22	·0896
1. 36	·0905
1. 48	·0900
2. 21	·0891
2. 39	·0900
2. 49	·0904
3. 11	·0905
3. 30	·0919
4. 10	·0907
4. 21	·0902
4. 40	·0912
5. 37	·0918
5. 55	·0909

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Nov. 8	
0. 0	·02690
1. 12	·02676
4. 30	{ ·02350 ·02409
8. 18	·02308
14. 4	·02437
22. 30	·02981
23. 59	·02998

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
Nov. 8		
1. 0	54·0	55·0
3. 0	56·7	57·0
9. 0	54·0	55·0
21. 0	46·0	49·5

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Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 8		Nov. 8						
h m	° ′ ″	h m		h m		h m	°	
5. 37	21. 22. 30	6. 26	·0944					
5. 50	22. 0	6. 52	·0921					
6. 10	16. 0	6. 58	·0925					
6. 23	10. 30	7. 15	·0919					
6. 33	15. 5	7. 42	·0931					
6. 40	14. 25	8. 0	·0921					
7. 15	15. 40	8. 21	·0927					
7. 32	14. 30	9. 14	·0927					
7. 58	18. 30	9. 22	·0931					
8. 13	17. 25	9. 50	·0932					
8. 56	18. 50	10. 10	·0944					
9. 30	17. 0	10. 42	·0937					
9. 53	18. 30	11. 11	·0947					
10. 20	17. 10	11. 51	·0949					
11. 15	20. 5	12. 19	·0933					
11. 50	19. 15	13. 13	·0952					
12. 20	21. 15	13. 45	·0943					
12. 37	19. 0	14. 13	·0949					
13. 15	23. 30	15. 50	·0942					
14. 15	19. 30	16. 52	·0947					
14. 45	21. 20	17. 15	·0942					
15. 15	19. 35	17. 30	·0944					
15. 40	21. 40	18. 18	·0940					
	***	19. 15	·0942					
20. 0	19. 10	21. 30	·0922					
	***	21. 51	·0924					
21. 3	15. 30	22. 51	·0917					
21. 42	17. 20	23. 30	·0925					
	***	23. 59	·0923					
23. 50	28. 30							
23. 59	26. 50							
Nov. 9		Nov. 9		Nov. 9		Nov. 9		
0. 0	21. 26. 50	0. 0	·0923	0. 0	·02998	1. 0	48·8	50·3
0. 11	28. 35	0. 27	·0920	2. 10	·02951	3. 0	50·8	52·0
	***	1. 19	·0913	9. 5[illegible]	·02578	9. 0	46·0	48·0
0. 37	26. 10	1. 52	·0914	17. 10	·02970	21. 0	41·0	44·0
	***	2. 10	·0908	23. 59	·02914			
1. 40	27. 35	2. 43	·0915					
1. 53	26. 20	2. 52	·0913					
2. 8	27. 5	3. 15	·0920					
2. 27	24. 15	3. 51	·0920					
2. 50	24. 25	4. 52	·0928					
3. 15	22. 50	5. 21	·0925					
3. 37	23. 0	5. 36	·0927					
3. 58	21. 30	5. 57	·0923					
5. 20	20. 25	6. 18	·0925					
5. 36	19. 30	6. 51	·0920					
5. 52	20. 10	7. 7	·0923					
6. 10	19. 30	7. 22	·0920					
6. 42	22. 30	8. 4	·0930					
7. 4	20. 35	8. 11	·0938					
7. 23	22. 15	8. 21	·0939					
7. 42	19. 45	8. 38	·0931					
7. 58	19. 15	9. 30	·0931					
8. 55	13. 30	9. 54	·0937					
9. 29	14. 30	10. 18	·0935					
9. 57	18. 20	10. 40	·0941					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 9		Nov. 9						
h m	° ′ ″	h m		h m		h m	°	°
10. 36	21. 19. 50	10. 54	·0939					
11. 15	19. 0	11. 52	·0949					
11. 40	20. 15	12. 15	·0947					
12. 0	17. 0	13. 6	·0946					
12. 37	20. 30	13. 30	·0951					
13. 28	22. 35	15. 32	·0952					
14. 15	21. 20	18. 15	·0961					
17. 8	21. 20	20. 22	·0954					
19. 37	18. 50	20. 45	·0945					
19. 50	17. 30	22. 0	·0933					
21. 14	15. 30	23. 44	·0924					
23. 6	23. 5	23. 59	·0925					
23. 20	26. 10							
23. 30	25. 0							
23. 59	26. 15							
Nov. 10		Nov. 10		Nov. 10		Nov. 10		
0. 0	21. 26. 15	0. 0	·0925	0. 0	·02914	1. 0	44·0	46·0
1. 54	29. 50	0. 44	·0929	2. 40	·02357	3. 0	47·0	49·0
2. 35	28. 35	1. 47	·0926	7. 46	·02301	9. 0	48·0	50·0
2. 43	29. 45	2. 7	·0911	12. 4	·02040	21. 0	43·8	46·5
2. 52	27. 45	2. 48	·0910	17. 20	·02142			
3. 5	28. 0	3. 14	·0925	20. 58	·02336			
3. 10	27. 30	3. 21	·0920	23. 59	·02537			
3. 20	29. 0	3. 30	·0924					
3. 26	27. 30	3. 44	·0907					
3. 37	29. 30	3. 52	·0910					
4. 26	17. 30	4. 4	·0901					
4. 50	23. 0	4. 37	·0931					
5. 7	25. 20	5. 22	·0910					
5. 40	21. 0	5. 44	·0924					
6. 0	22. 30	6. 5	·0925					
6. 29	13. 30	6. 25	·0911					
6. 42	19. 0	6. 36	·0921					
6. 46	17. 35	6. 42	·0914					
6. 57	22. 30	6. 49	·0920					
7. 20	15. 20	7. 7	·0900					
7. 50	19. 30	7. 29	·0918					
8. 24	17. 15	7. 40	·0917					
8. 50	18. 0	8. 30	·0927					
9. 20	15. 10	8. 43	·0920					
9. 28	18. 30	9. 18	·0933					
9. 40	17. 20	9. 43	·0932					
9. 48	17. 35	9. 54	·0935					
10. 0	15. 50	10. 16	·0924					
10. 15	16. 50	10. 28	·0922					
10. 50	13. 50	10. 55	·0925					
10. 54	14. 10	11. 7	·0918					
11. 20	7. 5	11. 29	·0933					
11. 40	15. 10	12. 11	·0908					
11. 58	7. 30	12. 48	·0932					
12. 11	8. 5		***					
13. 0	18. 0	14. 27	·0933					
13. 15	17. 35	16. 13	·0947					
15. 15	23. 0	16. 22	·0946					
16. 0	20. 0	17. 0	·0959					
16. 37	26. 10	17. 32	·0945					
17. 9	21. 35	17. 39	·0947					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 10		Nov. 10						
h m	° ′ ″	h m		h m		h m	°	°
17.37	21.21.40	17.44	·0941					
17.51	19.35	18.11	·0951					
18.20	22.30	18.44	·0937					
18.37	22. 0	19.22	·0961					
19. 0	34.10	19.51	·0944					
19.27	27.50	20.30	·0947					
19.56	22.30	21.55	·0925					
	***	22. 6	·0928					
21.50	15.30	22.37	·0920					
22. 7	19.45	23.17	·0917					
22.56	24. 0	23.29	·0921					
23.30	25. 5	23.59	·0916					
23.40	24.10							
23.52	25. 5							
23.59	24.25							
Nov. 11		Nov. 11		Nov. 11		Nov. 11		
0. 0	21.24.25	0. 0	·0916	0. 0	·02537	1. 0	47·0	48·8
1. 4	25. 5	3.30	·0915	1.37	·02490	3. 0	50·0	51·0
5.23	19.10	3.55	·0902	6. 5	·01949	9. 0	50·2	52·0
6.34	18.25	4.51	·0909	12.20	·01970	21. 0	43·0	45·0
7.56	19.20	5.14	·0913	16.40	·02117			
8.21	15. 5	6.10	·0912	17.48	·02070			
8.50	14.30	6.41	·0917	22.58	·02580			
9.10	11.50	7.12	·0915	23.59	·02642			
9.40	14.45	8. 0	·0921					
10.15	11.35	8.15	·0918					
10.42	14.30	8.42	·0926					
11.15	15.20	9. 9	·0923					
11.28	19.10	9.19	·0927					
11.40	16.55	9.51	·0914					
12.15	19.30	10.10	·0920					
13.33	22. 5	10.20	·0925					
13.45	24.25	10.52	·0920					
14. 7	21.30	11. 0	·0923					
14.50	19.30	11.20	·0922					
15. 4	17. 5	12. 0	·0931					
15.20	19.35	12.40	·0929					
15.27	19. 0	13.43	·0934					
15.33	20.30	13.54	·0947					
15.40	19.25	14.12	·0941					
16.27	32.45	14.39	·0940					
16.53	40.35	15.15	·0945					
17. 7	40.50	15.30	·0956					
17.36	36.25	16.26	·0929					
18.10	20.40	16.54	·0933					
18.22	19. 0	17.30	·0955					
18.26	20.15	17.45	·0932					
18.37	19.15	17.56	·0945					
18.40	20.30	18.14	·0934					
18.53	18.45	18.26	·0937					
18.57	20.30	18.50	·0933					
19. 5	18.45		***					
19.20	18. 0	22.15	·0927					
19.50	22.35	23.37	·0903					
20.42	16.30	23.47	·0910					
	***	23.59	·0903					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 11								
: h m	° ′ ″	h m		h m		h m	°	°
22.10	21.23.10							
22.26	22.20							
23. 5	24.50							
23.15	24. 0							
23.30	27.30							
23.59	26.30							
Nov. 12		Nov. 12		Nov. 12		Nov. 12		
0. 0	21.26.30	0. 0	·0903	0. 0	·02642	1. 0	47·0	48·0
0.27	24.50	0.27	·0903	1.37	·02605	3. 0	51·0	51·7
0.48	28. 5	0.51	·0911	5.18	·02010	9. 0	50·0	51·0
1.20	25.35	1.15	·0904	5.50	·02052	22.15	42·0	45·0
1.39	29.30	1.33	·0914	6.48	{ ·02029			
1.57	27. 0	2.20	·0895		·02638			
2. 8	24. 5	2.40	·0900	12.25	·02588			
2.20	26.10	3. 0	·0888	13. 7	·02510			
2.26	25. 5	3.25	·0895	17.20	·02740			
2.53	28.50	3.57	·0896	18.20	·02846			
3. 9	25.10	4.11	·0887	19.58	·02925			
3.20	26.20	4.51	·0911	23.59	·02959			
3.22	25.10	5.13	·0898					
3.27	26.35	5.22	·0895					
3.40	25. 0	5.30	·0910					
3.47	26.30	5.40	·0914					
4. 4	26. 0	5.45	·0910					
4.22	23.15	6.20	·0904					
4.53	22. 5	6.44	·0907					
5.22	6.20	6.54	·0903					
5.48	13.30	7.21	·0901					
6.20	19.20	7.55	·0906					
6.30	18.30	8.21	·0892					
7.15	19.40	9. 7	·0919					
7.56	16. 5	9.17	·0911					
8.15	17.50	10.12	·0897					
8.38	15.30	10.30	·0910					
8.57	16.20	10.50	·0899					
9.10	10.15	11.26	·0901					
9.20	14.30	11.45	·0893					
9.45	9.35	12.15	·0903					
10. 0	10.50	12.44	·0889					
10.15	8.35	12.55	·0904					
10.28	7.20	13. 0	·0897					
11. 0	12. 0	13.15	·0915					
11.20	9. 5	13.30	·0907					
11.50	13. 0	13.52	·0908					
12. 7	10. 5	14.10	·0915					
14.29	16. 5	14.16	·0911					
14.47	16. 0	14.43	·0915					
15. 8	18. 5	15. 2	·0910					
15.25	22.30	15.13	·0915					
15.45	20.20	15.33	·0910					
16.15	20.50	16. 0	·0915					
16.26	22.35	16.13	·0911					
16.33	21.40	16.30	·0915					
16.55	27. 0	16.49	·0914					
17.20	20.50	17.16	·0934					
18.20	29.50	17.32	·0927					
18.36	28.35	17.51	·0924					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.12		Nov.12						
h m	° ′ ″	h m		h m		h m	°	°
18. 50	21. 32. 5	18. 0	·0927					
18. 57	33. 10	18. 35	·0901					
19. 26	28. 30	19. 12	·0918					
19. 37	27. 20	19. 42	·0904					
19. 50	30. 5	20. 4	·0899					
20. 57	20. 30	20. 22	·0905					
21. 20	19. 25	20. 45	·0900					
21. 56	28. 5	21. 0	·0903					
22. 43	30. 5	21. 20	·0891					
23. 4	27. 30	22. 10	·0884					
23. 59	30. 20	22. 42	·0889					
		23. 0	·0881					
		23. 30	·0895 (†)					
Nov.13		Nov.13		Nov.13		Nov.13		
0. 0	21. 30. 20		(†)	0. 0	·02959	6. 30	45 ·7	47 ·5
0. 40	29. 45	0. 13	·0884	3. 4	·03118	21. 0	38 ·0	41 ·0
0. 53	26. 0	0. 42	·0893	9. 24	·02710			
1. 25	31. 35	0. 52	·0889	12. 14	·02658			
1. 52	28. 0	1. 21	·0903	13. 15	·02681			
2. 10	30. 15	1. 37	·0897	13. 40	·02629			
2. 27	29. 5	2. 25	·0917	17. 20	·02900			
2. 40	30. 5	2. 39	·0916	23. 59	·02862			
3. 4	23. 30	2. 48	·0910					
3. 15	24. 0	3. 10	·0922					
4. 25	21. 20	3. 36	·0917					
4. 50	21. 20	4. 0	·0923					
5. 20	31. 50	4. 13	·0922					
6. 7	18. 5	4. 54	·0935					
6. 50	15. 0	5. 5	·0930					
7. 15	20. 50	5. 21	·0931					
7. 37	18. 5	5. 33	·0922					
8. 53	18. 50	5. 45	·0926					
9. 20	14. 45	6. 42	·0897					
10. 0	11. 20	6. 50	·0908					
10. 17	14. 0	7. 5	·0911					
10. 45	13. 25	7. 21	·0902					
11. 22	7. 10	7. 56	·0919					
11. 51	12. 0	8. 12	·0916					
12. 30	8. 30	8. 51	·0918					
13. 2	15. 30	8. 56	·0916					
13. 20	14. 50	9. 25	·0927					
13. 26	17. 0	9. 45	·0920					
13. 37	16. 15	9. 51	·0923					
14. 50	22. 5	10. 21	·0905					
15. 15	18. 5	10. 45	·0911					
15. 45	22. 30	11. 11	·0903					
16. 3	19. 20	11. 43	·0900					
17. 2	20. 5	11. 54	·0908					
17. 40	24. 20	12. 15	·0905					
19. 5	22. 30	12. 37	·0908					
21. 4	16. 50	13. 0	·0900					
22. 20	18. 30	13. 20	·0921					
22. 39	20. 35	13. 25	·0918					
22. 42	19. 30	13. 44	·0926					
22. 56	20. 55	13. 51	·0924					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.13		Nov.13						
h m	° ′ ″	h m		h m		h m		
23. 13	21. 21. 20	14. 9	·0929					
23. 47	24. 25	14. 49	·0931					
23. 59	26. 0	15. 3	·0929					
		15. 51	·0941					
		16. 9	·0931					
		16. 39	·0937					
		17. 0	·0931					
		17. 12	·0935					
		17. 22	·0931					
		18. 17	·0929					
		18. 48	·0939					
		19. 11	·0935					
		19. 40	·0942 * * *					
		22. 19	·0914					
		22. 44	·0916					
		22. 52	·0909					
		23. 0	·0911					
		23. 18	·0910					
		23. 35	·0915					
		23. 52	·0914					
		23. 59	·0912					
Nov.14		Nov.14		Nov.14		Nov.14		
0. 0	21. 26. 0	0. 0	·0912	0. 0	·02862	1. 0	42 ·0	44 ·0
0. 58	26. 0	1. 0	·0902	1. 14	·02846	3. 0	[illegible]	47 ·0
1. 20	24. 40	3. 28	·0916	10. 46	·01937	9. 0	40 ·8	45 ·0
2. 26	25. 45	3. 36	·0920	23. 12	·02698	21. 0	39 ·0	41 ·0
5. 10	20. 35	4. 52	·0920	23. 59	·02729			
5. 50	20. 30	5. 21	·0926					
6. 20	17. 0	5. 55	·0911					
7. 7	18. 35	6. 13	·0909					
7. 26	21. 5	7. 35	·0921					
7. 57	21. 0	7. 51	·0919					
9. 30	17. 30	8. 10	·0925					
9. 53	20. 50	8. 30	·0922					
10. 13	19. 0	9. 22	·0935					
10. 30	22. 35	9. 45	·0927					
10. 53	17. 50	10. 0	·0936					
11. 20	18. 0	10. 22	·0930					
11. 37	14. 10	10. 38	·0937					
12. 7	14. 0	11. 11	·0926					
12. 56	18. 35	12. 40	·0935					
13. 22	17. 30	13. 0	·0931					
14. 30	22. 0	13. 13	·0936					
14. 50	21. 5	13. 33	·0933					
17. 15	21. 20	14. 7	·0942					
17. 26	20. 20	15. 21	·0941					
17. 33	21. 25	17. 0	·0948					
17. 46	20. 25	17. 12	·0953					
18. 0	21. 20	17. 17	·0949					
21. 6	18. 10	18. 9	·0950					
21. 37	16. 35	18. 45	·0956					
22. 20	18. 30	19. 52	·0956					
23. 15	21. 30	22. 27	·0929					
23. 59	23. 25	23. 11	·0916					
		23. 59	·0917					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov.15		Nov.15		Nov.15		Nov.15		
h m	° ′ ″	h m		h m		h m	°	
0. 0	21. 23. 25	0. 0	·0917	0. 0	·02729	1. 0	41·7	42·5
0. 28	25. 0	1. 33	·0911	2. 18	·02712	3. 0	44·0	45·0
0. 56	26. 35	2. 16	·0919	12. 30;	·02051	9. 0	47·0	47·7
1. 10	25. 20	2. 36	·0915	23. 59	·02471	21. 0	42·0	44·0
2. 37	24. 30	5. 22	·0935					
3. 15	21. 50	7. 0	·0941					
7. 26	18. 50*	7. 51	·0940					
13. 10	20. 25	8. 6	·0943					
13. 55	19. 30	9. 14	·0941					
14. 25	20. 35	9. 36	·0944					
14. 47	18. 30	11. 11	·0944					
15. 17	21. 5	12. 13	·0950					
	***	12. 17	·0947					
15. 53	21. 5	12. 38	·0948					
16. 30	18. 5	13. 0	·0947					
18. 32	20. 30	13. 19	·0951					
19. 30	20. 5	13. 44	·0951					
19. 40	18. 10	13. 56	·0946					
19. 42	19. 50	14. 41	·0953					
19. 50	17. 50	14. 51	·0946					
19. 56	19. 20	15. 11	·0947					
	***	15. 18	·0951					
21. 27	17. 0	15. 27	·0947					
	***	15. 33	·0950					
22. 5	19. 40	15. 42	·0946					
22. 24	19. 0	15. 54	·0953					
23. 37	24. 25	16. 0	·0951					
23. 59	24. 30	16. 24	·0953					
		16. 36	·0949					
		17. 0	·0947					
		18. 30	·0952					
		18. 59	·0957					
		19. 11	·0953					
		19. 21	·0958					
		19. 55	·0955					
		21. 11	·0933					
		22. 0	·0931					
		23. 2	·0914					
		23. 36	·0917					
		23. 59	·0909					
Nov.16		Nov.16		Nov.16		Nov.16		
0. 0	21. 24. 30	0. 0	·0909	0. 0	·02471	1. 0	46·0	46·7
0. 30	27. 25	0. 11	·0907	6. 4	·01876	3. 0	49·0	49·0
0. 59	26. 20	0. 28	·0913	12. 15	·01870	9. 0	50·0	50·7
1. 6	28. 50	2. 58	·0917	23. 59	·02272	21. 0	45·0	47·0
2. 10	29. 45	4. 21	·0919					
3. 20	24. 30	4. 43	·0914					
4. 45	21. 50	4. 52	·0919					
5. 6	19. 30	5. 27	·0917					
5. 20	20. 20	5. 45	·0931					
5. 45	14. 0	5. 51	·0929					
6. 21	20. 10	6. 7	·0933					
6. 50	15. 35	6. 16	·0930					
7. 20	11. 10	6. 42	·0917					
7. 45	15. 10	6. 54	·0926					
8. 6	14. 0	7. 11	·0925					
8. 19	15. 0	7. 30	·0939					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov.16		Nov.16						
h m	° ′ ″	h m		h m		h m	°	°
8. 50	21. 14. 5	7. 52	·0930					
9. 1	18. 35	8. 7	·0935					
9. 9	17. 20	8. 14	·0932					
10. 10	18. 20	8. 35	·0945					
11. 3	18. 30	8. 43	·0941					
12. 4	16. 35	8. 52	·0943					
12. 26	17. 40	9. 13	·0932					
12. 40	16. 55	11. 44	·0939					
13. 20	19. 0	12. 11	·0933					
13. 47	17. 50	12. 30	·0940					
14. 6	20. 5	12. 42	·0936					
16. 21	19. 25	13. 9	·0940					
16. 29	18. 5	13. 19	·0937					
16. 41	19. 30	13. 36	·0944					
17. 3	18. 0	13. 52	·0939					
17. 15	18. 40	14. 12	·0953					
	***	14. 52	·0941					
20. 10	18. 5	16. 22	·0946					
21. 4	16. 30	16. 31	·0945					
21. 54	17. 30	16. 45	·0951					
22. 47	21. 40	16. 54	·0946					
23. 59	24. 0	17. 12	·0952					
		17. 50	·0950					
		17. 55	·0955					
		19. 43	·0948					
		19. 52	·0950					
		20. 39	·0941					
		22. 2	·0925					
		22. 52	·0910					
		23. 59	·0907					
Nov.17		Nov.17		Nov.17		Nov.17		
0. 0	21. 24. 0	0. 0	·0907	0. 0	·02272	1. 0	48·0	48·3
0. 26	22. 30	0. 28	·0909	3. 10	·02081	3. 0	51·0	50·7
5. 47	18. 20	2. 22	·0900	5. 4	·01883	9. 0	50·5	51·0
7. 50	19. 30	3. 19	·0903	14. 50	·01998	21. 0	43·0	45·0
8. 43	18. 0	5. 30	·0910	21. 20	·02380			
9. 36	16. 30	5. 52	·0916	23. 59	·02617			
10. 4	19. 0	7. 29	·0918					
10. 36	18. 0	8. 10	·0917					
20. 3	20. 0	8. 44	·0932					
20. 50	19. 10	9. 10	·0924					
21. 5	17. 30	9. 29	·0922					
22. 20	18. 30	9. 52	·0927					
22. 56	22. 25	10. 18	·0921					
23. 59	23. 40	10. 44	·0927					
		11. 7	·0924					
		11. 30	·0930					
		12. 15	·0927					
		12. 36	·0931					
		13. 0	·0930					
		13. 17	·0934					
		14. 11	·0931					
			***					
		17. 28	·0944					
		20. 17	·0945					
		22. 14	·0915					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	° ′ ″	Nov.17 h m		h m		h m		°
		23. 11	·0913					
		23. 59	·0915					
Nov.18		Nov.18		Nov.18		Nov.18		
0. 0	21. 23. 40	0. 0	·0915	0. 0	·02617	1. 0	46·0	47·0
0. 46	25. 30	0. 45	·0921	2. 15	·02581	3. 0	48·0	49·0
0. 50	23. 35	1. 7	·0912	6. 40	·02100	9. 0	49·5	49·5
1. 7	24. 30	2. 14	·0913	10. 46	·01993	21. 0	46·0	47·0
1. 20	23. 20	2. 31	·0909	21. 40	·02157			
2. 0	23. 35	4. 15	·0915	23. 59	·02219			
2. 26	21. 30	4. 51	·0922					
2. 40	22. 0	5. 22	·0918					
	***	6. 45	·0928					
6. 0	19. 20	7. 46	·0908					
7. 22	21. 30	8. 10	·0921					
7. 36	20. 50	9. 26	·0918					
7. 42	21. 30	9. 43	·0923					
8. 0	16. 25	10. 17	·0927					
8. 26	18. 40	11. 6	·0926					
9. 2	19. 30	11. 38	·0929					
12. 4	18. 0	12. 11	·0921					
12. 26	18. 30	13. 15	·0921					
12. 37	17. 0	14. 7	·0929					
12. 50	18. 30	15. 11	·0927					
13. 27	14. 40	17. 14	·0933					
14. 0	17. 0		***					
14. 17	16. 5	20. 10	·0931					
16. 10	18. 45	22. 18	·0905					
18. 33	18. 20	23. 1	·0907					
20. 20	18. 30	23. 28:	·0903					
21. 28	17. 30	23. 54	·0909					
22. 2	20. 35	23. 59	·0908					
22. 15	18. 40							
	***							
22. 55	23. 30							
23. 40	24. 10							
23. 47	27. 50							
23. 59	24. 30							
Nov.19		Nov.19		Nov.19		Nov.19		
0. 0	21. 24. 30	0. 0	·0908	0. 0	·02219	1. 0	49·0	49·5
0. 27	22. 25	2. 52	·0899	2. 13	·02091	3. 0	53·0	52·7
0. 45	27. 30	3. 37	·0903	3. 34	·01937	9. 0	51·7	52·0
1. 37	22. 50	3. 56	·0902	3. 57	·01942	22. 30	42·0	42·5
1. 52	24. 35	4. 45	·0903		·02281			
2. 21	22. 10	5. 11	·0907	9. 51	·02120			
2. 40	23. 15	5. 49	·0901	16. 22	·02446			
3. 22	21. 0	6. 21	·0907	22. 56	·02951			
5. 6	21. 0	6. 44	·0902	23. 59	·02930			
5. 54	22. 35	7. 37	·0912					
6. 10	21. 40	8. 7	·0910					
6. 30	22. 30	8. 21	·0913					
7. 15	20. 0	8. 29	·0911					
8. 47	21. 20	8. 56	·0923					
9. 10	21. 25	9. 12	·0913					
9. 37	17. 30	9. 30	·0923					
10. 10	19. 0	9. 58	·0919					
11. 10	18. 20	11. 22	·0917					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.19		Nov.19						
h m	° ′ ″	h m				h m		
11. 48	21. 16. 5	19. 17	·0935					
12. 26	19. 0	23. 10	·0923					
12. 40	18. 30	23. 59	·0925					
13. 15	19. 30							
16. 0	19. 20							
16. 47	20. 30							
18. 10	19. 10							
18. 50	20. 15							
21. 7	18. 35							
21. 40	17. 25							
23. 20	22. 30							
23. 59	22. 50							
Nov.20		Nov.20		Nov.20		Nov.20		
0. 0	21. 22. 50	0. 0	·0925	0. 0	·02930	6. 45	44·5	46·5
0. 43	22. 10	0. 37	·0923	3. 17	·02911	21. 0	42·0	44·0
1. 10	22. 50	1. 7	·0929	7. 43	·02750			
1. 42	20. 35	1. 27	·0927	19. 52	·02857			
7. 57	19. 0	3. 44	·0927	21. 37	·02923			
8. 30	18. 0	5. 36	·0935	23. 59	·02908			
8. 53	17. 5	7. 25	·0936					
9. 13	18. 30	8. 0	·0931					
9. 38	17. 35	8. 22	·0935					
10. 3	18. 25	8. 40	·0929					
13. 0	19. 30	8. 57	·0931					
13. 42	18. 25	9. 10	·0929					
14. 10	19. 10	9. 56	·0927					
15. 20	17. 35	12. 18	·0936					
15. 50	19. 40	12. 44	·0935					
16. 36	17. 25	13. 6	·0939					
19. 6	18. 45	15. 20	·0935					
21. 47	19. 0	15. 51	·0946					
23. 20	25. 40	16. 52	·0941					
23. 59	25. 30	17. 40	·0941					
		18. 0	·0943					
		19. 36	·0941					
		21. 48	·0925					
		23. 59	·0914					
Nov.21		Nov.21		Nov.21		Nov.21		
0. 0	21. 25. 30	0. 0	·0913	0. 0	·02908	1. 0	45·0	47·0
2. 40	20. 40	0. 22	·0913	2. 26	·02807	3. 0	48·5	49·3
8. 53	17. 20	0. 42	·0917	8. 18	·01852	9. 0	53·0	54·0
10. 9	19. 20	4. 9	·0909	14. 36	·01928	21. 0	44·5	47·7
11. 5	18. 30	6. 48	·0917	23. 59	·02370			
11. 30	19. 20	9. 10	·0910					
12. 30	18. 25	10. 40	·0919					
13. 36	22. 20	10. 56	·0916					
14. 9	20. 30	11. 55	·0918					
14. 37	20. 40	12. 29	·0915					
16. 50	18. 45	13. 19	·0927					
17. 15	20. 0	15. 9	·0926					
20. 10	17. 20	16. 0	·0933					
21. 0	14. 30	16. 54	·0931					
21. 37	14. 50	19. 53	·0932					
21. 50	17. 0	22. 37	·0905					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov.21		Nov.21						
h m	° ′ ″	h m		h m		h m	°	°
22. 3	21. 15. 25	23. 11	·0915					
23. 59	22. 30	23. 59	·0909					
Nov.22		Nov.22		Nov.22		Nov.22		
0. 0	21. 22. 30	0. 0	·0909	0. 0	·02370	1. 0	48·0	49·6
0. 37	20. 0	0. 17	·0907	1. 20	·02358	3. 0	50·0	52·0
1. 6	22. 0	0. 48	·0911	3. 6	·02224	9. 0	54·4	56·0
2. 15	22. 10	2. 10	·0910	5. 15	·01910	21. 0	52·7	54·8
2. 43	20. 50	2. 37	·0907	6. 15	·01926			
3. 42	20. 50	3. 0	·0912	6. 40	·02037			
6. 58	17. 50	3. 17	·0909	9. 38	·01930			
7. 45	13. 45	5. 44	·0912	20. 47	·01979			
8. 7	16. 5	6. 10	·0916	23. 59	·02091			
8. 36	15. 0	7. 8	·0911					
10. 43	16. 35	7. 42	·0919					
20. 3	18. 15	9. 12	·0912					
20. 47	17. 0	12. 22	·0907					
21. 4	15. 30	18. 43	·0920					
23. 26	20. 25	20. 53	·0911					
23. 59	22. 30	23. 10	·0895					
		23. 59	·0902					
Nov.23		Nov.23		Nov.23		Nov.23		
0. 0	21. 22. 30	0. 0	·0902	0. 0	·02091	1. 0	54·5	55·5
0. 51	22. 0	1. 54	·0899	2. 58	·02049	3. 0	55·8	57·7
1. 37	24. 15	2. 27	·0901	4. 3	·01940	9. 0	57·0	60·0
	***	2. 49	·0893	5. 52	{ ·01982 ·02284	21. 0	51·0	55·0
2. 38	22. 50	3. 42	·0899					
3. 15	19. 20	4. 15	·0898	6. 23	·02237			
3. 50	20. 25	4. 44	·0903		(†)			
6. 28	16. 40	6. 21	·0904	9. 0	·02091*			
9. 26	16. 35	8. 13	·0911	21. 0	·02475*			
14. 58	20. 25	9. 20	·0908					
20. 28	17. 35	10. 21	·0913					
21. 20	16. 30	12. 6	·0911					
23. 33	23. 25	18. 14	·0925					
23. 59	24. 20	20. 0	·0921					
		22. 44	·0902					
		23. 59	·0904					
Nov.24		Nov.24		Nov.24		Nov.24		
0. 0	21. 24. 20	0. 0	·0904		(†)	1. 0	54·0	56·7
1. 26 :	21. 10	0. 50	·0910	0. 36	·02551	3. 0	56·0	57·7
7. 26	18. 45	1. 42	·0903	2. 30	·02496	9. 10	55·0	57·0
9. 8	18. 40	2. 43	·0900	7. 4	·02091	21. 0	49·7	52·0
9. 37	16. 40	3. 13	·0905	9. 48	·02100			
10. 22	18. 5	3. 37	·0901	22. 37	·02891			
10. 58	18. 20	5. 0	·0899	23. 59	·02886			
11. 15	19. 0	10. 10	·0909					
11. 37	17. 40	11. 39	·0919					
12. 3	20. 0	12. 0	·0914					
12. 45	23. 20	12. 37	·0917					
13. 20	20. 0	12. 57	·0930					
16. 26	18. 20	13. 45	·0920					
16. 54	19. 30	17. 7	·0930					
20. 17	17. 45	17. 20	·0934					
20. 56	16. 30	18. 45	·0934					
	***	20. 15	·0929					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov.24		Nov.24						
h m	° ′ ″	h m		h m		h m	°	°
23. 18	21. 22. 30	21. 39	·0910					
23. 59	22. 35	21. 52	·0913					
		22. 30	·0907					
		23. 59	·0911					
Nov.25		Nov.25		Nov.25		Nov.25		
0. 0	21. 22. 35	0. 0	·0911	0. 0	·02886	1. 0	51·5	53·0
0. 32	22. 35	2. 6	·0908	8. 37	·02726	3. 0	52·0	53·8
0. 50	24. 10	2. 26	·0911	20. 46	·02968	9. 0	51·5	53·0
1. 4	22. 40	3. 30	·0908		(†)	21. 0	48·0	51·0
4. 40	21. 30	4. 50	·0908					
5. 0	20. 35	5. 13	·0917					
5. 50	22. 15	5. 52	·0910					
6. 8	21. 0	6. 40	·0917					
6. 23	21. 35	7. 11	·0914					
8. 4	18. 20	9. 10	·0925					
20. 13	18. 20	13. 44	·0931					
20. 43	17. 15	19. 28	·0927					
23. 59	20. 30	22. 31	·0905					
		23. 27	·0905					
			(†)					
Nov.26		Nov.26		Nov.26		Nov.26		
0. 0	21. 20. 30	0. 0 :	·0906		(†)	1. 0	52·0	53·8
1. 56	21. 35	0. 50	·0905	0. 17	·02924	3. 0	53·0	55·0
10. 20	17. 10	1. 57	·0908	2. 41	·02842	9. 0	55·0	56·0
21. 26	18. 30	2. 44	·0905	6. 50	·02552	22. 40	52·0	53·5
22. 0	17. 25	3. 12	·0907	15. 36	·02518			
23. 59	20. 5	3. 40	·0911	21. 47	·02710			
		7. 58	·0918	23. 59	·02850			
		11. 42	·0915					
		14. 58	·0918					
		17. 28	·0925					
		20. 40	·0918					
		23. 59	·0909					
Nov.27		Nov.27		Nov.27		Nov.27		
0. 0	21. 20. 5	0. 0	·0909	0. 0	·02850	7. 0	52·0	52·0
0. 30	20. 30	2. 18	·0913	1. 56	·02940	21. 0	49·0	50·7
	***	3. 7	·0910	23. 59	·02766			
5. 33	21. 20	3. 42	·0915					
9. 9	18. 30	4. 9	·0910					
16. 45	18. 50	7. 7	·0921					
21. 26	17. 0	10. 0	·0924					
23. 59	21. 40	10. 13	·0922					
		17. 22	·0932					
		20. 6	·0925					
		22. 59	·0904					
		23. 59	·0902					
Nov.28		Nov.28		Nov.28		Nov.28		
0. 0	21. 21. 40	0. 0	·0902	0. 0	·02766	1. 0	51·7	52·0
0. 57	22. 15	1. 30	·0906	3. 15	·02642	3. 0	53·0	53·0
1. 56	23. 0	2. 52	·0902	8. 20	·02300	9. 0	51·5	51·7
4. 18	19. 20	3. 14	·0905	18. 36	·02839	21. 0	46·0	47·0
6. 3	20. 0	3. 48	·0907	23. 59	·02791			
6. 36	22. 0	5. 22	·0914					
8. 48	19. 50	5. 52	·0913					

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Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 28		Nov. 28						
h m	° ′ ″	h m		h m		h m	°	°
9. 46	21. 17. 20	6. 21	·0918					
13. 37	20. 0	6. 43	·0915					
14. 26	19. 0	7. 10	·0917					
20. 15	18. 0	7. 15	·0914					
21. 0	17. 5	8. 15	·0920					
23. 59	20. 35	8. 25	·0915					
		9. 9	·0914					
		9. 30	·0909					
		10. 15	·0916					
		10. 36	·0916					
		13. 0	·0924					
		14. 36	·0924					
		17. 24	·0931					
		18. 40	·0930					
		20. 15	·0931					
		22. 50	·0907					
		23. 59	·0905					
Nov. 29		Nov. 29		Nov. 29		Nov. 29		
0. 0	21. 20. 35	0. 0	·0905	0. 0	·02791	1. 0	49·0	50·0
1. 22	21. 30	2. 15	·0909	11. 15:	·02011	3. 0	51·5	52·0
2. 50	20. 25	3. 2	·0903	23. 59	·02726	9. 0	53·0	53·5
3. 5	19. 20	7. 37	·0913			21. 0	45·0	47·0
3. 30	20. 0	11. 0	·0923					
5. 45	17. 15	11. 13	·0920					
13. 15	18. 50	11. 30	·0922					
15. 30	18. 20	11. 54	·0921					
15. 45	16. 30	12. 26	·0923					
16. 5	15. 45	12. 41	·0920					
16. 36	18. 0	13. 7	·0926					
16. 54	18. 0	15. 21	·0922					
17. 3	18. 40	15. 51	·0933					
17. 13	17. 10	16. 55	·0927					
17. 33	19. 0	17. 10	·0931					
	***	17. 14	·0926					
20. 6	18. 30	18. 28	·0926					
	***	19. 43	·0933					
20. 30	19. 20	20. 40	·0926					
20. 52	19. 35	20. 54	·0927					
21. 26	17. 0	21. 31	·0918					
21. 33	18. 40	21. 42	·0920					
21. 50	18. 0	22. 9	·0910					
22. 20	19. 0	22. 33	·0907					
22. 34	21. 25	22. 45	·0909					
22. 47	19. 50	22. 58	·0903					
23. 3	23. 0	23. 59	·0906					
23. 24	18. 50							
23. 59	21. 5							
Nov. 30		Nov. 30		Nov. 30		Nov. 30		
0. 0	21. 21. 5	0. 0	·0906	0. 0	·02726	1. 0	48·0	49·0
	***	0. 51	·0903	1. 56	·02648	3. 0	50·0	51·0
1. 40	21. 25	0. 58	·0907	7. 52:	·02221	9. 0	49·0	50·7
1. 54	22. 55	1. 15	·0901	21. 17	·02830	21. 0	42·7	45·0
2. 26	20. 0	1. 52	·0906	23. 59	·02776			
3. 15	20. 40	2. 28	·0902					
3. 43	17. 45	3. 17	·0907					
6. 18	18. 30	3. 39	·0904					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 30		Nov. 30						
h m	° ′ ″	h m		h m		h m	°	°
7. 13	21. 19. 20	4. 51	·0917					
9. 40	18. 45	7. 15	·0921					
11. 30	17. 20	8. 6	·0926					
11. 47	19. 0	8. 40	·0921					
12. 7	18. 35	11. 14	·0922					
12. 30	20. 0	11. 30	·0927					
13. 37	19. 50	11. 52	·0925					
13. 58	18. 25	13. 44	·0928					
14. 30	19. 10	14. 51	·0926					
14. 49	18. 5	16. 9	·0935					
15. 0	19. 35	17. 32	·0935					
15. 43	19. 0	17. 50	·0940					
16. 4	20. 40	18. 50	·0935					
16. 44	19. 30	19. 45	·0936					
17. 9	20. 0	21. 21	·0921					
17. 38	16. 40	22. 40	·0915					
18. 26	19. 25	23. 59	·0910					
18. 58	18. 0							
19. 22	19. 5							
	***							
21. 20	16. 35							
	***							
22. 57	19. 20							
23. 30	21. 50							
23. 45	20. 50							
23. 59	22. 5							
Dec. 1		Dec. 1		Dec. 1		Dec. 1		
0. 0	21. 22. 5	0. 0	·0910	0. 0	·02776	1. 0	45·0	47·0
0. 6	22. 30	0. 7	·0911	1. 4	·02756	3. 0	48·0	48·5
0. 25	20. 30	0. 17	·0907	8. 21:	·02361	9. 0	47·5	48·7
	***	1. 5	·0911	19. 22	·02810	21. 0	42·0	44·0
1. 4	22. 30	2. 37	·0907	23. 59	·02756			
1. 30	21. 40	3. 39	·0917					
2. 5	23. 55	4. 15	·0912					
2. 51	21. 25	4. 43	·0916					
3. 35:	23. 0	4. 55	·0915					
4. 30	19. 30	7. 0	·0925					
	***	8. 52	·0928					
6. 0	18. 0	11. 40	·0935					
10. 0	17. 45	11. 56	·0934					
12. 30	20. 30	13. 12	·0936					
19. 0	17. 25	13. 49	·0939					
20. 50	19. 30	18. 42	·0941					
21. 15	21. 30	19. 37	·0936					
	(†)	20. 54	·0924					
		21. 52	·0922					
			(†)					
Dec. 2		Dec. 2		Dec. 2		Dec. 2		
1. 0	21. 19. 38*	1. 0	·0922*	0. 0	·02756	1. 0	44·0	45·0
3. 0	19. 4*	3. 0	·0926*	2. 20	·02724	3. 0	45·5	46·8
9. 0	20. 13*	9. 0	·0925*	9. 26:	·02410	9. 0	45·1	46·4
21. 0	15. 33*	21. 0	·0933*	17. 46	·02780	21. 0	39·0	42·0
				23. 0	·02737			
				23. 59	·02742			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

From December 2 to December 9 the time-piece giving motion to the Declination and Horizontal Force cylinder was away for repair.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 3		Dec. 3		Dec. 3		Dec. 3		
h m	° ′ ″	h m		h m		h m	°	°
1. 0	21. 20. 41*	1. 0	·0930*	0. 0	·02742	1. 0	41·0	42·5
3. 0	20. 16*	3. 0	·0926*	2. 4	·02667	3. 0	43·0	44·0
9. 0	19. 38*	9. 0	·0927*	12. 20:	·02150	9. 0	45·0	46·7
22. 34	13. 9*	22. 34	·0936*	23. 59	·02709	22. 34	38·0	41·0
Dec. 4		Dec. 4		Dec. 4		Dec. 4		
6. 33	21. 21. 47*	6. 33	·0936*	0. 0	·02709	6. 33	40·3	43·7
21. 0	18. 17*	21. 0	·0933*	6. 30	·02680	21. 0	48·5	51·0
				16. 40	·02379			
				23. 59	·01949			
Dec. 5		Dec. 5		Dec. 5		Dec. 5		
1. 0	21. 22. 38*	1. 0	·0892*	0. 0	·01949	1. 0	53·3	54·8
3. 0	16. 51*	3. 0	·0890*	2. 43	·01680	3. 0	55·7	57·0
9. 0	20. 4*	9. 0	·0906*	7. 4	·01803	9. 0	55·8	56·0
21. 0	17. 19*	21. 0	·0922*	12. 9	·01784	21. 0	46·7	47·5
				12. 37	·01840			
				13. 9	·01803			
				16. 50	·02230			
				22. 47	·02671			
				23. 59	·02690			
Dec. 6		Dec. 6		Dec. 6		Dec. 6		
1. 0	21. 23. 35*	1. 0	·0917*	0. 0	·02690	1. 0	49·0	50·0
3. 0	24. 15*	3. 0	·0912*	1. 37	·02640	3. 0	51·7	51·5
9. 0	15. 14*	9. 0	·0925*	6. 7	·02331	9. 0	51·5	52·0
21. 0	17. 23*	21. 0	·0923*	11. 47	·02158	21. 0	46·8	47·2
				15. 0	·02253			
				15. 40	·02183			
				23. 59	·02666			
Dec. 7		Dec. 7		Dec. 7		Dec. 7		
1. 0	21. 24. 19*	1. 0	·0898*	0. 0	·02666	1. 0	49·3	50·3
3. 0	24. 18*	3. 0	·0901*	1. 46	·02583	3. 0	53·0	53·0
9. 0	15. 45*	9. 0	·0901*	6. 28	·01970	9. 0	51·4	52·0
21. 0	19. 3*	21. 0	·0919*	8. 17	·01907	21. 0	46·3	48·5
				11. 20	·01950			
				11. 47	·01891			
				23. 6	·02450			
				23. 59	·02437			
Dec. 8		Dec. 8		Dec. 8		Dec. 8		
1. 0	21. 21. 52*	1. 0	·0900*	0. 0	·02437	1. 0	50·0	51·0
3. 0	20. 54*	3. 0	·0900*	0. 47	·02437	3. 0	52·0	53·0
9. 0	19. 0*	9. 0	·0919*	3. 50	·02208	9. 0	51·0	52·5
21. 0	15. 26*	21. 0	·0925*	8. 10:	·01820	21. 0	43·0	46·0
				23. 59	·02688			
Dec. 9		Dec. 9		Dec. 9		Dec. 9		
1. 0	21. 23. 25*	1. 0	·0904*	0. 0	·02688	1. 0	46·0	47·0
3. 0	23. 2*	3. 0	·0896*	2. 10	·02724	3. 0	48·0	49·8
9. 0	16. 11*	9. 0	·0924*	9. 52:	·02243	9. 0	48·0	49·5
21. 0	22. 2*	21. 0	·0931*	23. 15	·02718	21. 0	43·0	46·0
				23. 59	·02763			
Dec. 10		Dec. 10		Dec. 10		Dec. 10		
0. 50	21. 21. 15		(†)	0. 0	·02763	1. 0	46·0	48·0
1. 18	23. 30	1. 0	·0915*	1. 54	·02670	3. 0	49·0	50·0
	***	2. 15	·0911	6. 33	·02067	9. 0	48·0	49·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 10		Dec. 10		Dec. 10		Dec. 10		
h m	° ′ ″	h m		h m		h m	°	°
2. 25	21. 23. 30	3. 30	·0919	8. 57	·02158	22. 10	41·0	43·0
3. 40	21. 0	5. 26	·0924	9. 30	·02063			
5. 10	20. 15	5. 40	·0935	9. 50	·02123			
	***	6. 7	·0933	18. 18	·02318			
5. 48	21. 20	6. 44	·0920	23. 59	·02751			
6. 8	24. 0	6. 58	·0916					
6. 35	20. 10	7. 10	·0922					
6. 40	21. 5	7. 15	·0911					
6. 53	20. 0	7. 29	·0926					
7. 2	24. 35	7. 43	·0914					
7. 11	21. 5	7. 54	·0921					
7. 25	27. 0	8. 11	·0907					
7. 36	23. 0	8. 17	·0915					
7. 52	26. 50	8. 27	·0900					
8. 8	20. 5	8. 40	·0900					
8. 15	22. 15	9. 24	·0924					
8. 36	15. 10	9. 32	·0920					
8. 40	16. 0	9. 51	·0931					
9. 15	11. 0	10. 10	·0911					
9. 21	12. 0	10. 21	·0920					
9. 38	7. 0	10. 44	·0916					
9. 45	14. 30	11. 21	·0919					
9. 58	14. 40	11. 33	·0917					
10. 10	11. 35	12. 6	·0926					
10. 45	18. 0	12. 22	·0926					
11. 0	18. 0	12. 30	·0921					
11. 10	16. 30	12. 48	·0927					
	***	13. 34	·0933					
11. 50	17. 0	13. 51	·0930					
12. 10	19. 0	14. 18	·0928					
12. 30	16. 25	14. 26	·0934					
13. 35	18. 50	15. 0	·0941					
14. 4	15. 0	15. 19	·0937					
14. 11	16. 5	16. 28	·0940					
14. 19	15. 10	16. 52	·0936					
	***	17. 28	·0941					
16. 7	22. 5	19. 55	·0943					
16. 22	26. 30	21. 0	·0930					
16. 29	23. 35	22. 30	·0933					
16. 44	28. 10	22. 47	·0928					
17. 7	26. 35	22. 55	·0932					
	***	23. 7	·0924					
17. 39	27. 30		(†)					
18. 6	21. 40							
18. 25	23. 0							
19. 0:	19. 40							
19. 54	21. 30							
20. 10	20. 30							
21. 0	20. 40							
	***							
22. 15	24. 35							
22. 27	24. 0							
22. 36	26. 55							
	***							
23. 59	26. 50							
Dec. 11		Dec. 11		Dec. 11		Dec. 11		
0. 0	21. 26. 55	6. 55	·0922*	0. 0	·02751	6. 55	41·0	43·0
0. 30:	27. 30	21. 0	·0929*	3. 50	·02958	21. 0	38·0	40·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

December 11. The Photographic Trace of the Horizontal Force Magnet was too faint for use.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 11				Dec. 11				
h m	° ′ ″	h m		h m		h m	°	°
1. 10	21. 27. 0			6. 16	·02877			
1. 23	30. 0			8. 22	·02921			
1. 41	25. 45			9. 5	·02840			
2. 8	26. 0			9. 33	·02894			
2. 18	27. 0				***			
2. 35	26. 35			14. 4	·02817			
2. 58	24. 0			23. 59	·02796			
3. 15	22. 0							
	(†)							
9. 0	9. 5							
10. 0	14. 0							
10. 45	11. 50							
11. 14	17. 0							
11. 46	9. 15							
12. 0	14. 55							
12. 15	12. 0							
12. 34	17. 25							
	***							
13. 15	20. 0							
13. 52	14. 0							
14. 54	20. 10							
	***							
16. 45	21. 40							
17. 17	19. 0							
18. 25	19. 0							
20. 40	17. 0							
21. 36	18. 40							
21. 58	18. 0							
22. 13	21. 0							
	***							
23. 59	20. 20							
Dec. 12		Dec. 12		Dec. 12		Dec. 12		
0. 0	21. 20. 20	0. 0	·0916	0. 0	·02796	1. 0	42·0	43·0
3. 35	21. 30	0. 40	·0913	1. 3	·02740	3. 0	44·0	45·0
5. 0	20. 0	3. 55	·0926	9. 30	·01945	9. 0	47·0	48·5
9. 30	18. 0	7. 5	·0925	16. 2	·01807	21. 0	44·0	46·0
13. 40	19. 50	11. 13	·0926	23. 59	·01861			
18. 25	18. 30	14. 27	·0935					
18. 55	17. 5	16. 21	·0935					
20. 15	19. 0	17. 36	·0946					
20. 54	26. 25	18. 19	·0921					
21. 9	25. 0	19. 2	·0875					
21. 22	27. 0	19. 12	·0883					
21. 52	25. 25	19. 22	·0877					
21. 56	27. 0	20. 6	·0891					
22. 6	24. 40	20. 29	·0865					
22. 18	27. 30	20. 32	·0868					
22. 30	22. 10	20. 42	·0863					
22. 47	29. 0	20. 57	·0881					
22. 55	26. 10	21. 15	·0880					
23. 0	27. 0	21. 22	·0891					
23. 11	25. 15	21. 45	·0890					
23. 14	27. 30		(†)					
23. 21	26. 50							
23. 27	31. 10							
23. 32	29. 50							
23. 39	31. 40							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 12								
h m	° ′ ″	h m		h m		h m	°	°
23. 44	21. 28. 30							
23. 51	34. 0							
23. 59	30. 0							
Dec. 13		Dec. 13		Dec. 13		Dec. 13		
0. 0	21. 30. 0		(†)	0. 0	·01861	1. 0	47·0	48·0
0. 10	34. 30	1. 0	·0921*		***	3. 0	48·3	48·5
	(†)	3. 0	·0861*	1. 37	·02083	9. 0	46·7	47·2
1. 0	36. 50	3. 24	·0870		***	21. 0	37·3	40·2
1. 19	47. 45	4. 2	·0856	2. 6	·02010			
1. 44	30. 0	4. 29	·0859	2. 15	·02041			
1. 52	37. 0	4. 52	·0867	2. 40	·01840			
2. 0	33. 30	5. 0	·0864	5. 50	·01829			
2. 21	35. 40	5. 27	·0868	6. 33	·02098			
2. 26	29. 15		(†)	6. 48	·01963			
2. 31	33. 10	9. 0	·0884*	7. 15	·02083			
2. 52	23. 15	11. 11	·0880	7. 34	·02001			
3. 0	22. 20	11. 39	·0896	7. 50	·02082			
3. 12	24. 0	12. 10	·0889	8. 40	·01928			
3. 51	19. 30	12. 43	·0912	9. 16	·01940			
4. 52	17. 0	13. 11	·0899	9. 47	·01790			
5. 0	17. 35	13. 24	·0902	10. 0	·01826			
5. 10	15. 30	13. 32	·0897	10. 20	·01793			
5. 21	18. 0	14. 4	·0899	11. 42	·01890			
5. 42	17. 50	14. 59	·0911	13. 6	·01920			
5. 49	15. 0	15. 31	·0906	23. 59	·02768			
5. 54	16. 30	16. 17	·0910					
5. 59	14. 20	16. 32	·0920					
6. 21	33. 40	17. 9	·0913					
6. 28	32. 35	19. 0	·0924					
6. 39	43. 45	20. 30	·0926					
6. 40	42. 50	22. 5	·0901					
6. 45	45. 45	23. 21	·0896					
7. 11	10. 20	23. 40	·0901					
7. 24	8. 20		(†)					
7. 30	8. 40							
7. 42	4. 20							
7. 54	8. 30							
8. 10	8. 30							
8. 37	19. 0							
8. 52	24. 45							
9. 6	21. 25							
9. 35	12. 20							
9. 42	13. 30							
9. 54	3. 30							
10. 2	10. 50							
10. 12	6. 40							
10. 30	15. 40							
10. 51	12. 0							
11. 15	16. 0							
11. 36	12. 5							
11. 47	14. 20							
12. 10	19. 30							
12. 12	18. 40							
12. 17	20. 30							
12. 30	18. 30							
14. 21	21. 0							
14. 28	22. 40							
	***							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 13								
h m	° ′ ″	h m		h m		h m	°	°
14. 52	21. 22. 45							
15. 17	21. 0							
15. 39	22. 30							
	***							
16. 32	21. 30							
16. 58	24. 0							
17. 36	23. 35							
17. 45	22. 20							
17. 54	23. 40							
18. 10	22. 40							
19. 22	22. 10							
	***							
21. 30	16. 50							
21. 39	18. 20							
21. 52	17. 30							
22. 17	18. 20							
22. 28	20. 15							
22. 54	22. 30							
23. 20	21. 50							
23. 44	22. 40							
23. 59	22. 0							
Dec. 14		Dec. 14		Dec. 14		Dec. 14		
0. 0	22. 22. 0		(†)	0. 0	·02768	1. 0	39·8	40·5
0. 17	22. 0	0. 40	·0893	2. 33	·02718	3. 0	41·0	42·0
0. 22	18. 20	0. 52	·0891	8. 22	·02390	9. 0	41·6	42·0
0. 30	21. 55	1. 21	·0895	14. 56	·02282	21. 0	35·0	38·0
0. 39	22. 40	2. 36	·0893	16. 7	·02380			
1. 5	21. 0	3. 5	·0899	16. 20	·02340			
1. 20	22. 15	4. 28	·0909	17. 15	·02441			
1. 28	21. 10	5. 0	·0902	20. 43	·02738			
2. 45	20. 0	6. 0	·0903	23. 59	·02930			
3. 3	20. 40	6. 15	·0910					
3. 59	19. 30	6. 27	·0906					
4. 12	18. 0	6. 52	·0911					
4. 30	19. 20	7. 5	·0907					
5. 46	19. 40	7. 22	·0909					
5. 57	19. 0	7. 56	·0907					
7. 51	19. 55	8. 18	·0896					
8. 28	12. 0	8. 58	·0910					
9. 27	16. 50	9. 22	·0907					
10. 12	11. 45	9. 52	·0914					
	***	10. 11	·0911					
11. 0	11. 50	11. 10	·0917					
12. 10	17. 0	11. 30	·0908					
12. 43	11. 15	11. 52	·0906					
12. 51	11. 45	12. 0	·0920					
12. 57	11. 0	12. 13	·0917					
13. 21	15. 0	12. 52	·0936					
13. 54	27. 0	13. 13	·0930					
14. 29	27. 30	13. 26	·0936					
14. 43	19. 25	13. 36	·0931					
14. 50	20. 40	13. 50	·0937					
14. 58	19. 45	14. 19	·0903					
15. 41	33. 35	14. 36	·0897					
15. 51	35. 0	15. 2	·0944					
16. 12	21. 0	15. 21	·0919					
16. 28	26. 30	15. 42	·0927					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 14		Dec. 14						
h m	° ′ ″	h m		h m		h m	°	°
16. 52	21. 34. 0	15. 55	·0911					
17. 15	29. 30	16. 19	·0947					
17. 22	31. 0	16. 40	·0914					
17. 36	27. 55	16. 49	·0911					
17. 58	28. 45	17. 39	·0957					
18. 37	23. 0	17. 47	·0947					
18. 54	20. 30	18. 40	·0931					
19. 27	22. 20	18. 51	·0934					
20. 7	19. 20	18. 59	·0928					
20. 15	19. 55	19. 26	·0922					
20. 43	17. 30	19. 43	·0931					
21. 27	17. 40	19. 46	·0928					
21. 40	19. 20	19. 57	·0932					
21. 50	18. 20	20. 10	·0930					
22. 30	20. 0	20. 26	·0936					
22. 42	22. 30	20. 52	·0927					
	***	21. 50	·0918					
23. 30	23. 30	22. 10	·0910					
	(†)	22. 52	·0906					
		23. 0	·0910					
		23. 10	·0907					
		23. 12	·0909					
		23. 28	·0900					
			(†)					
Dec. 15		Dec. 15		Dec. 15		Dec. 15		
	(†)		(†)	0. 0	·02930	1. 0	39·0	40·5
1. 6	21. 24. 0	1. 0	·0900*	1. 40	·02863	3. 0	42·0	43·0
1. 43	25. 50	1. 21	·0899	11. 4⁚	·01990	9. 0	43·0	43·7
2. 55	26. 0	1. 40	·0897	23. 17	·02648	21. 0	35·0	37·0
3. 50	25. 45		***	23. 59	·02651			
4. 7	23. 30	3. 30	·0909					
4. 21	25. 45	3. 48	·0897					
5. 7	22. 0	4. 0	·0905					
5. 55	21. 10	4. 32	·0904					
6. 39	17. 40	5. 27	·0917					
6. 46	15. 20	5. 47	·0902					
6. 54	17. 30	6. 32	·0913					
7. 31	16. 20	6. 45	·0903					
8. 11	20. 0	6. 54	·0913					
9. 10	18. 45	7. 10	·0903					
10. 52	19. 50	7. 30	·0911					
11. 11	18. 40	7. 52	·0913					
11. 44	20. 0	8. 2	·0911					
16. 59	22. 55	9. 33	·0916					
17. 25	21. 35		***					
18. 0	22. 50	10. 14	·0928					
18. 22	21. 0	10. 40	·0925					
19. 44	20. 30	10. 52	·0931					
20. 7	21. 30	11. 22	·0927					
21. 6	17. 40	12. 30	·0936					
21. 50	19. 0	13. 33	·0935					
22. 14	21. 40	15. 51	·0943					
23. 7	20. 0	16. 13	·0941					
23. 21	22. 30	17. 45	·0952					
23. 43	22. 0	18. 45	·0945					
	(†)	19. 21	·0946					
		19. 28	·0951					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁚ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Dec. 15						
h m	° ′ ″	h m		h m		h m	°	°
		20. 7	·0943					
		20. 24	·0943					
		21. 4	·0931					
		21. 31	·0943					
		22. 52	·0915					
		23. 12	·0925					
		23. 16	·0921					
		23. 27	·0922					
			(†)					
Dec. 16		Dec. 16		Dec. 16		Dec. 16		
	(†)		(†)	0. 0	·02651	1. 0	38 ·0	39 ·0
1. 0	21. 22. 35*	0. 17	·0918	2. 4	·02618	3. 0	41 ·0	41 ·3
1. 21	23. 0	0. 54	·0922	12. 47:	·01783	9. 0	44 ·2	44 ·5
1. 35	19. 5	1. 30	·0920	23. 10	·02450	21. 0	35 ·0	37 ·0
1. 42	20. 50	1. 45	·0911	23. 59	·02462			
	***	2. 12	·0913					
2. 36	21. 45	2. 52	·0911					
2. 49	19. 30	3. 37	·0919					
2. 58	20. 30	3. 45	·0914					
3. 7	19. 35	3. 59	·0919					
	***	4. 58	·0891					
3. 43	20. 35	5. 37	·0911					
3. 58	19. 30	6. 20	·0911					
4. 45	21. 40	6. 31	·0917					
5. 0	18. 45	6. 51	·0915					
5. 10	19. 30	7. 0	·0927					
5. 26	18. 15	7. 37	·0915					
6. 7	19. 5		***					
6. 58	16. 30	10. 48	·0917					
9. 21	14. 50	10. 54	·0922					
12. 44	17. 40	11. 13	·0920					
20. 25	18. 30	11. 15	·0925					
20. 40	17. 30	12. 4	·0919					
21. 42	15. 10	14. 7	·0931					
22. 52	16. 30	14. 20	·0927					
	(†)	19. 21	·0949					
		21. 3	·0951					
		23. 4	·0928					
			(†)					
Dec. 17		Dec. 17		Dec. 17		Dec. 17		
0. 0	21. 16. 5		(†)	0. 0	·02462	1. 0	38 ·0	38 ·0
1. 25	20. 0	0. 42	·0924	1. 43	·02417	3. 0	41 ·0	41 ·0
2. 56	21. 30	1. 53	·0917	10. 47:	·01837	9. 0	42 ·0	42 ·0
4. 25	19. 30	3. 36	·0917	23. 59	·02358	22. 40	33 ·5	38 ·5
4. 50	16. 25	4. 20	·0923					
5. 50	14. 20	4. 43	·0916					
6. 45	16. 45	4. 52	·0918					
8. 9	17. 0	5. 9	·0916					
8. 50	7. 5	5. 22	·0920					
9. 10	12. 50	5. 40	·0917					
9. 37	8. 20	6. 5	·0925					
10. 3	14. 0	6. 37	·0920					
10. 13	12. 50	7. 30	·0923					
10. 26	13. 45	7. 42	·0919					
10. 40	12. 5	8. 6	·0923					
11. 40	14. 50	8. 21	·0919					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 17		Dec. 17						
h m	° ′ ″	h m		h m		h m	°	°
13. 7	21. 16. 10	8. 57	·0927					
13. 37	13. 50	9. 45	·0922					
16. 20	17. 30	10. 21	·0934					
16. 48	16. 30	10. 40	·0929					
17. 17	18. 0	11. 39	·0927					
17. 59	17. 5	12. 49	·0942					
18. 42	18. 30	13. 15	·0932					
20. 50	18. 45	14. 9	·0939					
21. 10	16. 35	16. 14	·0941					
21. 22	18. 20	17. 18	·0947					
22. 13	18. 20	17. 29	·0953					
22. 33	17. 0	17. 36	·0947					
23. 17	20. 30	17. 46	·0951					
23. 59	20. 10	20. 13	·0950					
		20. 42	·0958					
			***					
		22. 15	·0944					
		23. 20	·0943					
		23. 44	·0933					
		23. 59	·0933					
Dec. 18		Dec. 18		Dec. 18		Dec. 18		
0. 0	21. 20. 10	0. 0	·0933	0. 0	·02358	7. 15	35 ·0	37 ·5
1. 50	21. 30	3. 21	·0946	3. 40	·02439	21. 0	29 ·5	31 ·3
5. 40	17. 35	3. 54	·0945	11. 3:	·02420			
20. 15	18. 35	5. 32	·0951	19. 26	·03042			
21. 10	17. 5	5. 49	·0956	23. 59	·02974			
23. 59	21. 5	9. 40	·0956					
		15. 10	·0963					
		15. 20	·0961					
		19. 28	·0961					
		20. 52	·0967					
		23. 59	·0948					
Dec. 19		Dec. 19		Dec. 19		Dec. 19		
0. 0	21. 21. 5	0. 0	·0948	0. 0	·02974	1. 0	31 ·5	33 ·5
1. 4	20. 40	4. 59	·0947	2. 4	·02883	3. 0	35 ·0	36 ·0
2. 26	20. 15	5. 52	·0951	12. 33:	·02117	9. 0	38 ·3	38 ·5
4. 6	17. 50	9. 12	·0936	23. 59	·02500	21. 0	32 ·0	35 ·0
5. 45	16. 35	9. 57	·0944					
6. 54	17. 20	10. 13	·0935					
9. 52	17. 5	11. 22	·0946					
10. 8	18. 50	13. 3	·0945					
10. 27	16. 10	17. 28	·0955					
13. 25	18. 0	18. 30	·0964					
13. 47	17. 0	21. 30	·0949					
14. 45	18. 15	22. 57	·0943					
16. 45	17. 10	23. 44	·0933					
17. 47	17. 50	23. 59	·0936					
18. 10	20. 5							
19. 0	18. 0							
21. 26	18. 30							
22. 30	22. 25							
23. 0	23. 5							
23. 59	24. 0							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 20		Dec. 20		Dec. 20		Dec. 20		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 24. 0	0. 0	·0936	0. 0	·02500	1. 0	33·0	35·0
2. 44	22. 5	1. 13	·0943	1. 56	·02481	3. 0	37·0	38·0
3. 38	23. 50	1. 25	·0937	3. 22	·02372	9. 7	41·3	40·9
4. 37	21. 5	2. 9	·0937	7. 6	·01928	21. 0	41·2	43·0
5. 6	17. 30	2. 49	·0932	10. 13	·01896			
5. 40	20. 30	3. 21	·0931		(†)			
6. 28	23. 50	4. 21	·0923	21. 0	·01928*			
6. 57	23. 45	4. 30	·0925		(†)			
7. 20	21. 5	4. 49	·0922					
7. 40	20. 25	5. 15	·0934					
8. 47	13. 0	6. 9	·0936					
9. 40	13. 20	6. 30	·0923					
10. 15	12. 5	6. 39	·0927					
11. 45	13. 55	7. 12	·0914					
13. 25	18. 5	7. 38	·0917					
13. 44	17. 50	7. 52	·0912					
14. 0	18. 30	8. 7	·0920					
14. 33	17. 30	8. 50	·0921					
14. 47	18. 20	9. 14	·0933					
19. 32	15. 50	9. 51	·0914					
22. 7	18. 0	11. 26	·0921					
23. 43	21. 15	11. 40	·0927					
23. 59	21. 10	11. 52	·0923					
		12. 51	·0931					
		14. 36	·0933					
		16. 45	·0943					
		20. 42	·0938					
		21. 40	·0930					
		23. 59	·0919					
Dec. 21		Dec. 21		Dec. 21		Dec. 21		
0. 0	21. 21. 10	0. 0	·0919		(†)	1. 0	46·0	47·0
1. 13	23. 0	0. 29	·0917	0. 38	·01927	3. 0	49·0	49·0
2. 40	19. 40	0. 52	·0925	4. 20	·02064	9. 0	49·1	48·4
2. 57	20. 40	1. 44	·0914	11. 56	·02160	21. 0	42·0	43·0
3. 33	19. 20	2. 36	·0914	23. 59	·02738			
4. 33	21. 20	2. 51	·0919					
5. 10	21. 0	3. 7	·0913					
5. 47	18. 30	4. 36	·0913					
6. 57	22. 5	4. 52	·0915					
7. 6	19. 10	5. 30	·0909					
7. 40	22. 0	6. 0	·0912					
7. 58	19. 30	6. 40	·0903					
8. 20	15. 35	7. 21	·0907					
9. 0	17. 0	7. 56	·0898					
9. 17	15. 25	8. 21	·0905					
10. 15	17. 10	10. 17	·0915					
10. 53	15. 5	10. 40	·0913					
12. 0	14. 30	11. 0	·0919					
12. 30	16. 0	12. 54	·0915					
12. 46	15. 5	17. 52	·0945					
13. 15	17. 30	20. 22	·0935					
14. 3	16. 25	20. 52	·0944					
14. 56	18. 45	23. 30	·0919					
15. 27	16. 30	23. 45	·0924					
15. 40	17. 50	23. 59	·0928					
15. 58	16. 30							
16. 20	17. 35							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 21								
h m	° ′ ″	h m		h m		h m	°	°
16. 40	21. 15. 35							
16. 53	16. 30							
17. 47	15. 25							
18. 56	17. 30							
20. 10	17. 35							
20. 30	16. 15							
20. 56	18. 20							
	***							
23. 59	20. 0							
Dec. 22		Dec. 22		Dec. 22		Dec. 22		
0. 0	21. 20. 0	0. 0	·0928	0. 0	·02738	1. 0	44·0	45·0
0. 45	24. 10	0. 40	·0935	3. 20	·02624	3. 0	46·0	47·5
1. 15	21. 10	1. 25	·0923	13. 26⁏	·02110	9. 0	47·0	47·7
1. 26	21. 55	1. 56	·0918	23. 59	·02417	21. 0	43·0	45·0
1. 57	19. 30	2. 14	·0934					
2. 48	22. 0	2. 38	·0921					
2. 57	21. 15	2. 52	·0920					
3. 10	23. 10	3. 10	·0933					
3. 27	21. 45	3. 52	·0907					
4. 52	22. 30	4. 27	·0915					
5. 53	19. 0	5. 39	·0913					
8. 0	17. 25	6. 51	·0927					
10. 50	16. 5	8. 13	·0929					
11. 10	16. 35	10. 44	·0921					
11. 33	15. 15	12. 57	·0931					
12. 17	17. 30	13. 15	·0941					
12. 56	13. 0	13. 40	·0930					
13. 50	18. 0	14. 28	·0930					
15. 36	15. 30	17. 28	·0945					
15. 56	16. 5	17. 46	·0941					
16. 17	15. 0	19. 0	·0944					
16. 45	16. 5	19. 28	·0947					
17. 6	16. 5	20. 29	·0943					
17. 45	18. 10	22. 13	·0925					
18. 45	17. 0	22. 52	·0923					
20. 36	17. 5	23. 15	·0927					
22. 10	19. 10	23. 30	·0925					
22. 50	23. 20	23. 53	·0933					
23. 59	19. 35	23. 59	·0931					
Dec. 23		Dec. 23		Dec. 23		Dec. 23		
0. 0	21. 19. 35	0. 0	·0930	0. 0	·02417	1. 0	44·8	46·2
1. 0	20. 30	0. 21	·0921	3. 30	·02336	3. 0	46·0	47·5
1. 22	20. 10	0. 53	·0933	6. 8	·02167	9. 0	46·0	47·0
1. 33	21. 5	1. 10	·0927	12. 20	·02162	21. 0	45·0	47·0
1. 53	20. 15	1. 56	·0926	12. 56	·02110			
2. 6	21. 0	3. 14	·0905	18. 30	·02450			
2. 30	20. 5	3. 39	·0915	23. 59	·02421			
3. 6	20. 0	5. 36	·0927					
3. 25	18. 20	6. 5	·0913					
3. 57	18. 30	6. 13	·0917					
4. 20	19. 45	6. 43	·0902					
4. 42	19. 20	7. 6	·0919					
5. 25	16. 35	7. 17	·0909					
5. 54	19. 20	7. 25	·0915					
6. 20	16. 30	7. 36	·0909					
6. 28	18. 35	7. 49	·0914					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁏ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 23		Dec. 23						
h m	° ′ ″	h m		h m		h m	°	°
6. 56	21. 9. 0	8. 10	·0913					
7. 15	14. 40	8. 36	·0922					
7. 28	14. 0	8. 43	·0941					
7. 40	15. 0	9. 15	·0927					
	***	12. 0	·0927					
9. 3	16. 5	12. 19	·0943					
9. 52	14. 0	12. 40	·0933					
10. 47	12. 35	13. 6	·0925					
12. 9	20. 30	13. 21	·0931					
12. 26	17. 40	13. 30	·0930					
12. 43	29. 50	13. 54	·0937					
13. 26	19. 0	14. 30	·0931					
13. 55	14. 0	17. 55	·0942					
14. 40	17. 10	19. 37	·0937					
14. 51	16. 50	23. 7	·0911					
15. 0	18. 0	23. 59	·0904					
	***							
18. 58	16. 35							
20. 57	15. 10							
23. 59	20. 0							
Dec. 24		Dec. 24		Dec. 24		Dec. 24		
0. 0	21. 20. 0	0. 0	·0904	0. 0	·02421	1. 0	49·0	50·0
0. 33	19. 10	0. 45	·0907	3. 50	·02109	3. 0	52·0	52·0
1. 4	20. 40	1. 0	·0911	6. 25	·02121	9. 0	51·0	51·6
1. 17	20. 0	2. 22	·0908		·02202	22. 53	47·5	48·5
1. 53	21. 10	3. 6	·0910	7. 17	·02243			
2. 5	20. 35	3. 55	·0918		·02286			
2. 21	20. 0	4. 51	·0918	14. 8	·02297			
2. 33	20. 35	6. 10	·0922	23. 59	·02621			
2. 45	19. 25	11. 37	·0923					
2. 53	20. 0	11. 52	·0925					
3. 10	19. 5	12. 12	·0922					
6. 57	18. 40	17. 15	·0925					
7. 15	18. 0	17. 45	·0931					
11. 20	17. 20	18. 19	·0929					
12. 0	16. 45	19. 50	·0933					
12. 47	17. 40	21. 44	·0916					
13. 20	15. 30	23. 59	·0905					
14. 20	17. 50							
17. 43	18. 30							
18. 20	17. 15							
18. 42	18. 25							
21. 26	16. 5							
	***							
23. 10	19. 20							
23. 32	19. 0							
23. 59	19. 35							
Dec. 25		Dec. 25		Dec. 25		Dec. 25		
0. 0	21. 19. 35	0. 0	·0905	0. 0	·02621	8. 55	50·0	51·0
	***	0. 43	·0903	1. 52	·02556	21. 13	47·5	48·4
2. 7	19. 35	1. 36	·0908	7. 15:	·02310			
2. 42	17. 30	2. 37	·0902	18. 36	·02582			
5. 10	17. 30	3. 25	·0912	23. 59	·02642			
10. 22	16. 35	4. 13	·0911					
11. 45	13. 20	6. 56	·0924					
12. 28	16. 20	7. 43	·0922					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 25		Dec. 25						
h m	° ′ ″	h m		h m		h m	°	°
12. 50	21. 17. 35	9. 19	·0927					
13. 40	15. 50	9. 51	·0923					
14. 10	18. 0	10. 37	·0928					
16. 45	17. 50	11. 12	·0921					
17. 4	16. 40	12. 34	·0929					
17. 37	17. 20	13. 41	·0927					
20. 26	16. 25	16. 40	·0936					
21. 15	15. 0	20. 30	·0937					
22. 0	16. 30	21. 54	·0923					
22. 40	16. 20	23. 59	·0915					
23. 59	20. 5							
Dec. 26		Dec. 26		Dec. 26		Dec. 26		
0. 0	21. 20. 5	0. 0	·0915	0. 0	·02642	7. 6	49·8	50·2
1. 20	20. 0	3. 17	·0927	5. 47:	·02430	21. 0	43·3	44·8
2. 27	21. 15	3. 55	·0924	21. 48	·03100			
3. 40	19. 30	4. 17	·0927	23. 0	·03170			
4. 50	23. 5	4. 48	·0921	23. 59	·03178			
6. 57	19. 30	5. 55	·0921					
9. 0	18. 0	8. 11	·0931					
9. 30	18. 0	8. 39	·0926					
10. 4	15. 30	10. 22	·0921					
12. 27	18. 40	12. 14	·0932					
14. 28	17. 25	14. 26	·0933					
14. 43	20. 0	14. 42	·0939					
15. 26	18. 0	15. 44	·0935					
16. 0	21. 20	15. 59	·0941					
16. 40	17. 30	18. 0	·0941					
	***	18. 27	·0944					
17. 38	18. 15	19. 5	·0941					
17. 49	19. 0	20. 29	·0938					
18. 3	17. 30	22. 30	·0916					
18. 10	18. 5	23. 29	·0915					
18. 19	16. 50	23. 59	·0918					
18. 22	18. 10							
18. 30	17. 35							
18. 57	19. 20							
21. 40	17. 30							
23. 59	20. 5							
Dec. 27		Dec. 27		Dec. 27		Dec. 27		
0. 0	21. 20. 5	0. 0	·0918	0. 0	·03178	1. 0	47·0	48·0
0. 36	19. 30	0. 51	·0921	0. 13	·03177*	3. 0	49·0	50·0
1. 6	22. 20	2. 13	·0916		(†)	9. 3	51·0	51·7
1. 30	20. 30	2. 37	·0919	1. 0	·03161	21. 0	47·3	48·7
1. 42	21. 25	2. 57	·0917	2. 18	·03010			
2. 26	20. 10	4. 28	·0920	11. 36:	·02421			
2. 37	20. 50	5. 0	·0925	19. 38	·02887			
2. 53	19. 30	5. 36	·0918	23. 59	·02841			
9. 38	17. 5	8. 25	·0925					
10. 20	13. 30	9. 42	·0920					
11. 10	14. 0	10. 21	·0926					
11. 40	12. 30	10. 43	·0923					
14. 3	15. 35	10. 52	·0925					
14. 20	15. 20	11. 39	·0911					
14. 27	16. 5	11. 52	·0913					
14. 36	15. 20	12. 15	·0911					
14. 50	16. 25	12. 40	·0918					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 27		Dec. 27						
h m	° ′ ″	h m		h m		h m	°	°
15. 0	21. 15. 40	12. 52	·0917					
15. 20	17. 10	13. 17	·0921					
16. 10	16. 20	13. 36	·0916					
17. 10	17. 45	14. 22	·0925					
17. 26	16. 0	14. 36	·0938					
17. 54	16. 10	14. 49	·0931					
18. 22	18. 0	15. 7	·0928					
	***	17. 9	·0931					
21. 15	16. 45	17. 17	·0933					
22. 38	18. 25	18. 20	·0931					
	(†)	20. 36	·0931					
		21. 21	·0919					
		22. 7	·0915					
		23. 15	·0915					
		23. 30	·0909					
		23. 59	·0909					
		Dec. 28		Dec. 28		Dec. 28		
		0. 0	·0909	0. 0	·02841	1. 0	50·0	51·0
		0. 37	·0910	2. 20	·02683	3. 0	51·0	51·7
		0. 57	·0917	3. 42	·02670	9. 0	50·7	50·8
		1. 13	·0913	8. 10	·02396	21. 0	48·0	49·0
		2. 6	·0916	13. 15	·02578			
		2. 36	·0909	23. 59	·02863			
		3. 54	·0913					
		5. 13	·0909					
		5. 43	·0916					
		7. 15	·0919					
		8. 9	·0915					
		8. 44	·0919					
		9. 57	·0907					
		10. 15	·0914					
		10. 30	·0907					
		10. 59	·0913					
		12. 37	·0914					
		12. 51	·0911					
		15. 44	·0925					
		19. 44	·0929					
		21. 50	·0914					
		22. 5	·0917					
		22. 20	·0913					
		23. 13	·0915					
		23. 24	·0913					
		23. 59	·0917					
		Dec. 29		Dec. 29		Dec. 29		
		0. 0	·0917	0. 0	·02863	1. 0	49·0	50·0
		1. 16	·0923	4. 10	·02830	3. 0	50·0	51·0
		1. 42	·0921	9. 40:	·02338	9. 0	54·0	55·0
		2. 0	·0925	13. 43	·02180	21. 0	52·0	53·0
		2. 22	·0921	23. 59	·02390			
		2. 59	·0928					
		3. 17	·0921					
		6. 13	·0916					
		8. 0	·0921					
		11. 0	·0918					
		11. 52	·0921					
		12. 30	·0917					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Dec. 29						
h m	° ′ ″	h m		h m		h m	°	°
		12. 54	·0923					
		13. 40	·0918					
		15. 0	·0922					
		15. 30	·0919					
		19. 44	·0922					
		20. 43	·0920					
		21. 21	·0909					
		21. 30	·0911					
		21. 45	·0908					
		22. 10	·0913					
		23. 7	·0903					
		23. 42	·0911					
		23. 59	·0910					
		Dec. 30		Dec. 30		Dec. 30		
		0. 0	·0910	0. 0	·02390	1. 0	53·0	53·8
		0. 56	·0915	3. 42	·02370	3. 0	53·5	54·8
		1. 29	·0906	7. 50	·02206	9. 0	55·0	55·2
		2. 11:	·0915	10. 4	·02240	21. 0	53·0	54·0
		2. 43	·0903	17. 22	·02237			
		3. 10	·0894	22. 30	·02410			
		4. 27	·0910	23. 59	·02408			
		5. 55	·0915					
		7. 11	·0906					
		7. 30	·0909					
		8. 31	·0900					
		9. 36	·0897					
		10. 0	·0914					
		10. 39	·0885					
		10. 55	·0899					
		11. 13	·0896					
		11. 27	·0897					
		11. 52	·0894					
		12. 13	·0899					
		12. 26	·0896					
		13. 14	·0901					
		13. 22	·0898					
		13. 59	·0901					
		14. 15	·0897					
		16. 28	·0911					
		17. 40	·0909					
		19. 21	·0913					
		20. 55	·0909					
		21. 7	·0905					
		22. 20	·0893					
		23. 21	·0897					
		23. 59	·0895					
		Dec. 31		Dec. 31		Dec. 31		
		0. 0	·0895	0. 0	·02408	1. 0	55·0	56·0
		0. 30	·0903	1. 7	{ ·02380	3. 0	57·5	58·0
		1. 2	·0901		·02241	9. 0	59·0	59·0
		1. 39	·0904	11. 48	·02225	22. 20	56·3	57·1
		2. 13	·0897	16 43	·02236			
		2. 33	·0901	23. 24	·02463			
		4. 50	·0905		(†)			
		5. 21	·0909					
		5. 45	·0907					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

December 28. From this date the Declination Magnet was under adjustment.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
h m	° ′ ″	Dec. 31 h m		h m		h m	°	°
		6. 40	·0911					
		6. 55	·0908					
		7. 14	·0911					
		7. 44	·0907					
		8. 10	·0911					
		8. 28	·0911					
		8. 43	·0907					
		10. 0	·0904					
		10. 11	·0908					
		10. 27	·0896					
		10. 46	·0909					
		11. 0	·0905					
		11. 13	·0905					
		11. 26	·0901					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
h m	° ′ ″	Dec. 31 h m		h m		h m	°	°
		13. 9	·0909					
		14. 45	·0909					
		14. 57	·0911					
		15. 14	·0910					
		17. 19	·0921					
			* * *					
		19. 22	·0919					
		20. 22	·0928					
		21. 10	·0913					
		22. 44	·0905					
		22. 55	·0901					
		23. 15	·0900					
			(†)					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

OBSERVATIONS

OF THE

MAGNETIC DIP.

1859.

During the year 1859, the observations of the Magnetic Dip were made with the instrument by Robinson used in preceding years, and described in the volume of *Greenwich Magnetical and Meteorological Observations* for 1847, and in preceding volumes. With this instrument are used four nine-inch needles, two of which, marked A and A 2, were made by Barrow, and two, marked A 1 and A 3, were made by Dent. In the tabular statement of the values of the Magnetic Dip these needles are called Barrow A and Barrow A 2, and Dent A 1 and Dent A 3.

MAGNETIC DIP, observed at the ROYAL OBSERVATORY, GREENWICH, in the Year 1859.

Day and Approximate Hour, 1859.		Needle.	Magnetic Dip.	Observer.
	d h		° ′	
January	5. 21	Barrow A 2	68. 23 ·25	H C
	25. 21	Dent A 1	68. 17 ·25	H C
February	2. 21	Dent A 3	68. 26 ·25	H C
	3. 21	Barrow A	68. 31 ·00	H C
	16. 22	Dent A 1	68. 15 ·75	H C
	23. 22	,, A 3	68. 26 ·75	T D
March	0. 23	Barrow A 2	68. 24 ·50	T D
	7. 22	Dent A 1	68. 16 ·00	T D
	8. 23	Barrow A	68. 39 ·00	H C
	15. 22	Dent A 3	68. 27 ·75	T D
	17. 23	Barrow A 2	68. 27 ·25	T D
	21. 21	Dent A 1	68. 16 ·00	T D
	24. 0	Barrow A	68. 31 ·00	T D
	29. 0	Dent A 3	68. 27 ·00	T D
April	1. 0	Barrow A 2	68. 31 ·25	H C
	4. 21	Dent A 1	68. 16 ·75	H C
	5. 23	,, A 3	68. 34 ·25	H C
	6. 22	Barrow A 2	68. 31 ·25	T D
	10. 22	,, A	68. 58 ·00	H C
	10. 23	,, A 2	68. 27 ·50	H C
	11. 1	,, A 2	68. 25 ·00	H C
	12. 22	Dent A 1	68. 15 ·25	T D
	18. 23	Barrow A	68. 31 ·50	H C
	22. 0	Dent A 3	68. 27 ·25	T D
	25. 23	,, A 1	68. 16 ·25	H C
	27. 22	,, A 3	68. 27 ·75	T D
May	5. 23	Barrow A 2	68. 30 ·50	T D
	9. 23	Dent A 1	68. 14 ·75	T D
	12. 22	Barrow A 2	68. 31 ·00	T D
	16. 22	Dent A 3	68. 27 ·50	T D
	23. 22	,, A 1	68. 18 ·25	T D
	25. 23	Barrow A 2	68. 31 ·25	T D
June	1. 0	Dent A 3	68. 28 ·25	T D
	8. 22	,, A 1	68. 19 ·00	T D
	13. 22	Barrow A 2	68. 31 ·00	T D
	14. 23	Dent A 3	68. 28 ·50	T D
	16. 23	,, A 1	68. 19 ·50	T D
	20. 22	Barrow A 2	68. 30 ·50	T D
	29. 0	Dent A 3	68. 24 ·00	T D
July	5. 0	Dent A 1	68. 20 ·50	T D
	7. 0	Barrow A 2	68. 28 ·00	T D
July	13. 0	Dent A 3	68. 26 ·25	T D
	15. 0	,, A 1	68. 20 ·25	T D
	19. 0	Barrow A 2	68. 30 ·25	T D
	20. 22	Dent A 3	68. 25 ·25	T D
	25. 21	,, A 1	68. 24 ·00	T D
	27. 23	Barrow A 2	68. 32 ·75	T D
	30. 1	Dent A 3	68. 25 ·50	T D
August	4. 0	Dent A 1	68. 18 ·25	T D
	8. 22	Barrow A	68. 30 ·25	T D
	10. 22	,, A 2	68. 28 ·50	T D
	15. 21	Dent A 3	68. 26 ·25	T D
	18. 0	Barrow A	68. 32 ·00	T D
	22. 23	Dent A 1	68. 20 ·75	T D
	25. 21	Barrow A 2	68. 30 ·50	T D
	31. 0	Dent A 3	68. 26 ·75	T D
September	2. 22	Barrow A 2	68. 21 ·75	H C
	6. 0	,, A	68. 29 ·00	T D
	8. 22	Dent A 1	68. 22 ·00	T D
	12. 22	,, A 3	68. 25 ·00	T D
	14. 22	Barrow A 2	68. 28 ·00	T D
	20. 1	Dent A 1	68. 22 ·75	T D
	23. 22	Barrow A	68. 53 ·50	H C
	25. 21	,, A	68. 41 ·00	H C
	27. 23	Dent A 1	68. 24 ·50	T D
	29. 22	Barrow A 2	68. 27 ·50	T D
October	2. 22	Dent A 1	68. 22 ·50	H C
	3. 22	,, A 3	68. 26 ·25	T D
	5. 21	Barrow A 2	68. 29 ·00	T D
	6. 21	,, A	68. 22 ·00	H C
	21. 2	Dent A 3	68. 32 ·75	H C
	31. 21	,, A 1	68. 28 ·75	H C
November	2. 0	Barrow A 2	68. 35 ·25	H C
	2. 22	Dent A 3	68. 26 ·75	T D
	8. 0	Barrow A	68. 25 ·50	H C
	8. 21	Dent A 1	68. 21 ·50	T D
	10. 23	Barrow A 2	68. 32 ·75	T D
	11. 22	Dent A 3	68. 29 ·25	H C
	16. 22	,, A 1	68. 22 ·50	H C
	28. 21	Barrow A 2	68. 32 ·75	T D
December	5. 22	Barrow A	68. 38 ·00	H C
	9. 22	Dent A 1	68. 16 ·25	H C

The initials T D and H C are those of Mr. Downs and Mr. Henry Criswick.

MONTHLY MEANS of MAGNETIC DIPS, at the ROYAL OBSERVATORY, GREENWICH, in the Year 1859.

Month, 1859.	Barrow, A.	Number of Obser-vations.	Dent, A 1.	Number of Obser-vations.	Barrow, A 2.	Number of Obser-vations.	Dent, A 3.	Number of Obser-vations.
	° ′		° ′		° ′		° ′	
January	....	..	68. 17 ·25	1	68. 23 ·25	1	....	..
February	68. 31 ·00	1	68. 15 ·75	1	....	..	68. 26 ·50	2
March	68. 35 ·00	2	68. 16 ·00	2	68. 25 ·88	2	68. 27 ·38	2
April	68. 44 ·75	2	68. 16 ·08	3	68. 28 ·75	4	68. 29 ·75	3
May	....	..	68. 16 ·50	2	68. 30 ·92	3	68. 27 ·50	1
June	....	..	68. 19 ·25	2	68. 30 ·75	2	68. 26 ·92	3
July	....	..	68. 21 ·58	3	68. 30 ·33	3	68. 25 ·67	3
August	68. 31 ·13	2	68. 19 ·50	2	68. 29 ·50	2	68. 26 ·50	2
September	68. 41 ·17	3	68. 23 ·08	3	68. 25 ·75	3	68. 25 ·00	1
October	68. 22 ·00	1	68. 22 ·50	1	68. 29 ·00	1	68. 29 ·50	2
November	68. 25 ·50	1	68. 24 ·25	3	68. 33 ·58	3	68. 28 ·00	2
December	68. 38 ·00	1	68. 16 ·25	1	....	..	....	..
Mean	68. 35 ·52	13	68. 19 ·55	24	68. 29 ·22	24	68. 27 ·39	21

For this Table the monthly means have been formed without reference to the hour at which the observation was made on each day, as in preceding years no certain difference was found between observations taken at 21h and at 3h.

ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS
OF
DEFLEXION OF A MAGNET
FOR
ABSOLUTE MEASURE
OF
HORIZONTAL FORCE.

1859.

The Apparatus used for observation of the Deflexion of a Magnet is described, and the method of computing the results is explained, in the *Greenwich Magnetical and Meteorological Observations*, 1847, Introduction, page xlv, and in the preceding Volume for 1846. The Magnet marked $\frac{D}{XX}$ (the same which was used from September 1845), has been employed to produce the deflexion of another magnet, marked $\frac{H}{23}$ (of nearly the same dimensions): and the vibrations then observed are those of $\frac{D}{XX}$.

The weight of $\frac{D}{XX}$ is 507·302 grains, or 32·873 grammes.

The length of $\frac{D}{XX}$ is 0·3025 foot, or 92·198 millimètres.

The diameter of $\frac{D}{XX}$ is 0·025 foot, or 7·620 millimètres.

Its moment of inertia, therefore, (using the English grain and foot as the units of weight and measure,) is 3·88826.

The weight of the embracing frame and mirror is 108·242 grains, or 7·014 grammes; and, on examining the distribution of this weight, it was thought probable that its moment of inertia would be nearly the same as if it were uniformly distributed over the mirror, whose horizontal length is 0·0658 foot; its moment of inertia is therefore 0·03905.

The weight of the suspending stalk with a pulley is 39·377 grains, or 2·552 grammes, and its moment of inertia (estimated as probably the same as if it had been condensed on the pulley whose diameter is 0·0233 foot), is 0·00135.

The following is the explanation of the notation used:—

m = the magnetic moment of the deflecting magnet $\frac{D}{XX}$.

X = the absolute measure of horizontal magnetic force.

K = the moment of inertia of $\frac{D}{XX}$ with its stirrup and pulley as suspended for vibration = 3·92866, using the English foot and grain as the unit of length and weight.

π the circumference of circle to diameter 1.

T the time of vibration in seconds of mean solar time.

Then when the natural sine of the observed deflexion (the Deflecting Magnet being in the Lateral Position) is expressed by the formula

$$\frac{a}{(\text{distance})^3} + \frac{b}{(\text{distance})^5}$$

we have for the formulæ of computation

$$\frac{m}{X} = \frac{1}{2} a$$

$$mX = \frac{\pi^2 K}{T^2}$$

from which m and X are found.

The computation of the values of m and X has, to the year 1857, been made in reference to English measure only, using the foot and the grain as the units of length and weight; but, for comparison with foreign observations of the Absolute Intensity of Magnetism, it is desirable that X should be expressed also in reference to French measure, in terms of the millimètre and milligramme. If an English foot be supposed equal to α times the millimètre, and a grain be equal to β times the milligramme, then it is plain that, for the reduction of $\frac{m}{X}$ and mX to French measure, these must be multiplied by α^3 and $\alpha^2\beta$ respectively. Hence, X^2 must be multiplied by $\frac{\beta}{\alpha}$, and X by $\sqrt{\frac{\beta}{\alpha}}$. Assuming that the mètre is equal to 39·37079 inches, and the gramme equal to 15·432349 grains, $\log. \sqrt{\frac{\beta}{\alpha}}$ will be found to be = 9·6637805, and the factor for reducing the English values of X to French values will be 0·46108, or $\frac{1}{2 \cdot 1689}$. The values of X in French measure thus derived from those in English measure are given in the proper table.

The natural sine of the observed deflexion, when the Deflecting Magnet is in the Axial Position, is treated in the same manner as the former, for expressing it by the formula

$$\frac{a^1}{(\text{distance})} + \frac{b^1}{(\text{distance})^5}$$

but no further use is made of these deflexions.

For the determination of the Absolute Measure of Horizontal Force on those days on which vibrations, unaccompanied by Deflexions, were observed, it is assumed that the quantity m (which is peculiar to the magnet) changes at a uniform rate from one observation of deflexion to the next; and the comparison of its interpolated value with the value of mX given by the vibration determines the value of X.

ABSTRACT of the OBSERVATIONS of DEFLEXION of a MAGNET for ABSOLUTE MEASURE of HORIZONTAL FORCE.

Month and Day, 1859.	Position of Deflecting Magnet with regard to Suspended Magnet.	Distances of Centers of Magnets.	Temperature.	Observed Deflexion.	Mean of the Times of Vibration of Deflecting Magnet.	Number of Vibrations.	Temperature.	Observer.
		ft. in.	°	° ′ ″	s		°	
January 13	Lateral	1. 0	43 ·0	8. 9. 21 ·62	5 ·952	100	43 ·0	H C
	Axial............			4. 26. 7 ·11				
	Lateral	1. 6		2. 31. 26 ·20				
	Axial............			1. 17. 24 ·96	5 ·978	100	42 ·5	
February 14	Lateral	1. 0	43 ·9	8. 12. 14 ·17	5 ·958	100	48 ·8	H C
	Axial............			4. 25. 16 ·13				
	Lateral	1. 6		2. 30. 23 ·11				
	Axial............			1. 19. 1 ·26	5 ·944	100	48 ·3	
March 2	Lateral	1. 0	52 ·3	8. 12. 38 ·92	5 ·932	100	49 ·0	H C
	Axial............			4. 26. 8 ·41				
	Lateral	1. 6		2. 30. 52 ·16				
	Axial............			1. 17. 41 ·75	5 ·954	100	53 ·6	
April 4	Lateral	1. 0	65 ·9	8. 9. 35 ·46	5 ·987	100	62 ·5	H C
	Axial............			4. 25. 49 ·00				
	Lateral	1. 6		2. 29. 35 ·50				
	Axial............			1. 17. 14 ·42	5 ·958	100	68 ·0	
May 6	Lateral	1. 0	62 ·7	8. 11. 18 ·81	5 ·952	100	56 ·2	H C
	Axial............			4. 26. 57 ·77				
	Lateral	1. 6		2. 31. 18 ·45				
	Axial............			1. 16. 57 ·59	5 ·940	100	61 ·8	
June 8	Lateral	1. 0	76 ·1	8. 9. 27 ·21	5 ·949	100	74 ·0	H C
	Axial............			4. 19. 34 ·21				
	Lateral	1. 6		2. 30. 36 ·93				
	Axial............			1. 15. 3 ·68	5 ·950	100	77 ·5	
July 6	Lateral	1. 0	78 ·1	8. 6. 34 ·29	5 ·948	100	79 ·0	H C
	Axial............			4. 22. 55 ·51				
	Lateral	1. 6		2. 29. 33 ·19				
	Axial............			1. 16. 22 ·94	5 ·968	100	83 ·0	
August 12	Lateral	1. 0	76 ·5	8. 9. 42 ·95	5 ·909	100	73 ·0	H C
	Axial............			4. 25. 44 ·65				
	Lateral	1. 6		2. 28. 42 ·57				
	Axial............			1. 16. 30 ·57	5 ·968	100	79 ·5	
Sept. 12	Lateral	1. 0	69 ·8	8. 6. 32 ·74	5 ·957	100	68 ·2	N
	Axial............			4. 20. 53 ·97				
	Lateral	1. 6		2. 26. 51 ·40				
	Axial............			1. 14. 40 ·30	5 ·937	100	70 ·7	
October 5	Lateral	1. 0	70 ·2	8. 5. 58 ·66	5 ·963	100	68 ·0	N
	Axial............			4. 25. 26 ·69				
	Lateral	1. 6		2. 27. 53 ·90				
	Axial............			1. 16. 24 ·96	5 ·959	100	70 ·5	
November 3	Lateral	1. 0	52 ·4	8. 27. 57 ·80	5 ·952	100	49 ·5	H C
	Axial............			4. 29. 35 ·13				
	Lateral	1. 6		2. 33. 0 ·89				
	Axial............			1. 18. 58 ·19	5 ·939	100	53 ·0	
December 9	Lateral	1. 0	42 ·0	8. 34. 23 ·04	5 ·943	100	38 ·3	N
	Axial............			4. 30. 8 ·06				
	Lateral	1. 6		2. 29. 41 ·32				
	Axial............			1. 16. 2 ·49	5 ·950	100	42 ·5	

The lengths of 1 foot and 1 foot 6 inches answer to 304·8 and 457·2 millimètres respectively.
The initials H C and N are those of Mr. Henry Criswick and Mr. Nash.

COMPUTATION of the VALUES of ABSOLUTE MEASURE of HORIZONTAL FORCE.

Month and Day, 1859.	In English Measure.										Value of X in French Measure.
	Apparent Value of a.	Apparent Value of b.	Apparent Value of a^1.	Apparent Value of b^1.	Adopted Value of a, assuming the Value of b (−0·00716) as applicable to all.	Log. ½ a = Log. $\frac{m}{X}$	Adopted Time of Vibration of Deflecting Magnet.	Log m X.	Value of X.	Value of m.	
							s				
January 13	+0·15403	−0·01216	0·07493	0·00240	+0·14342	8·87410	5·965	0·03732	3·816	0·2856	1·759
February 14	+0·14546	−0·00276	0·07796	−0·00087	+0·14305	8·87304	5·951	0·03936	3·829	0·2859	1·766
March 2	+0·15226	−0·00944	0·07541	0·00193	+0·14401	8·87584	5·943	0·04053	3·822	0·2872	1·762
April 4	+0·15072	−0·00878	0·07469	0·00256	+0·14305	8·87304	5·973	0·03616	3·815	0·2848	1·759
May 6	+0·15335	−0·01092	0·07393	0·00365	+0·14382	8·87526	5·946	0·04009	3·823	0·2869	1·763
June 8	+0·14649	−0·00459	0·07229	0·00314	+0·14248	8·87138	5·950	0·03951	3·838	0·2854	1·769
July 6	+0·15135	−0·01029	0·07384	0·00257	+0·14237	8·87104	5·958	0·03834	3·834	0·2849	1·768
August 12	+0·14913	−0·00716	0·07341	0·00382	+0·14288	8·87253	5·938	0·04126	3·840	0·2863	1·771
September 12	+0·14659	−0·00553	0·07129	0·00453	+0·14177	8·86928	5·947	0·03994	3·849	0·2849	1·775
October 5	+0·14857	−0·00768	0·07332	0·00382	+0·14187	8·86960	5·961	0·03790	3·838	0·2843	1·770
November 3	+0·15253	−0·00531	0·07686	0·00148	+0·14790	8·88691	5·946	0·04009	3·772	0·2907	1·739
December 9	+0·15041	−0·00134	0·07157	0·00693	+0·14925	8·89069	5·947	0·03994	3·755	0·2920	1·731
	Mean -	−0·00716									

VALUES of ABSOLUTE MEASURE of HORIZONTAL FORCE, from OBSERVATIONS of VIBRATION of the DEFLECTING MAGNET $\frac{\text{D}}{\text{XX}}$, unaccompanied by DEFLEXION.

Month and Day, 1859.		Adopted Time of Vibration.	Temperature.	Log. m X in English Measure.	Value of m interpolated from the Deflexion Observations. In English Measure.	Inferred Value of X in English Measure.	Value of X in French Measure.	Observer.
		s	°					
January	11	5·932	45·5	0·04214	0·2856	3·858	1·779	N
	28	5·937	46·8	0·04141	0·2858	3·849	1·775	N
February	23	5·944	47·0	0·04038	0·2866	3·829	1·766	N
March	1	5·945	49·5	0·04024	0·2871	3·821	1·762	N
	10	5·944	47·8	0·04038	0·2866	3·829	1·766	N
	24	5·944	53·0	0·04038	0·2856	3·843	1·772	N
	31	5·942	40·0	0·04067	0·2851	3·852	1·776	N
April	26	5·955	55·5	0·03878	0·2862	3·820	1·762	N
May	5	5·945	54·0	0·04024	0·2868	3·825	1·764	N
	26	5·943	67·3	0·04053	0·2859	3·840	1·771	N
June	23	5·945	64·5	0·04024	0·2851	3·848	1·774	H C
July	16	5·985	79·0	0·03441	0·2853	3·794	1·749	N
	26	5·977	79·0	0·03557	0·2856	3·800	1·752	N
August	19	5·962	79·5	0·03776	0·2860	3·814	1·759	N
September	20	5·955	55·5	0·03878	0·2847	3·841	1·771	N
October	3	5·980	70·7	0·03514	0·2843	3·814	1·759	H
	29	5·960	46·0	0·03805	0·2896	3·769	1·738	H
November	17	5·947	40·5	0·03994	0·2912	3·765	1·736	H
December	7	5·957	42·0	0·03848	0·2919	3·743	1·726	H
	22	5·931	36·0	0·04228	0·2925	3·768	1·738	H
	27	5·951	45·7	0·03936	0·2927	3·741	1·725	H

The number of vibrations employed in each determination was 100.

The initials H C, N, and H are those of Mr. Henry Criswick, Mr. Nash, and Mr. Howe.

It will be remarked that, as no correction has been applied for temperature, the result is affected with a slight error, unless the temperature in these vibration-observations coincide with the temperature interpolated between the deflexion-observations.

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

METEOROLOGICAL OBSERVATIONS.

1859.

The day in the first column of the following tables is to be understood, generally, as defined in civil reckoning.

The barometer is described in the *Greenwich Magnetical and Meteorological Observations*, 1847, Introduction, page xlviii, and in the corresponding parts of several preceding volumes. The barometer has been read at 21^h, 0^h, 3^h, 9^h (Astronomical), on every day, excepting on Sundays, and on Good Friday and Christmas Day, on which days fewer observations have been taken. Every reading has been reduced to the reading which would have been obtained at the temperature 32° of the mercury and scale, by application of the correction given in table II. (pages 82 to 87) of the Report of the Committee of Physics of the Royal Society. The mean of the reduced readings has then been taken for each civil day, and finally converted into mean daily reading, by application of the correction inferred from Mr. Glaisher's paper in the *Philosophical Transactions*, 1848, part I.

The positions of all the thermometers are described in the Introduction, 1847, page lxix.

The thermometers used for determining the highest temperature of the air, and the highest state of the wet-bulb thermometer, are mercurial thermometers invented by Messrs. Negretti and Zambra, and described in the *Results of Meteorological Observations*, 1851, Introduction, page (xcvi); and those for the lowest are of Rutherford's construction, described in the Introduction, 1847, page lxvii: they are self-registering. The readings given are corrected for index-errors.

The dry-bulb and wet-bulb thermometers are described in the Introduction, 1847, page xlix; their scales have been verified from time to time, in the manner there described.

A mean daily reading of the dry thermometer is inferred from the mean of observations taken at the same hours as the observations of the barometer, corrected by a quantity given in the *Phil. Trans.*, 1848, part I. Another mean daily reading is inferred from the mean of the maximum and minimum thermometers, also corrected by a small quantity given in the same paper. The mean daily value given in the tables is found by combining these two corrected means giving them weights proportional to the number of observations from which they are respectively derived.

The dew-point has been inferred exclusively from simultaneous observations of the dry-bulb and wet-bulb thermometers. In order to find the difference between the dry-bulb reading and the dew-point, the difference between the dry-bulb and the wet-bulb readings has been multiplied by a factor taken from the following table (deduced by Mr. Glaisher from the comparison of all the simultaneous readings of the dry-bulb, wet-bulb, and dew-point thermometers, from the year 1840 to the end of the year 1854).

TABLE OF FACTORS, BY WHICH THE DIFFERENCE OF READINGS OF THE DRY-BULB AND WET-BULB THERMOMETERS IS TO BE MULTIPLIED, IN ORDER TO PRODUCE THE DIFFERENCE BETWEEN THE READINGS OF THE DRY-BULB AND DEW-POINT THERMOMETERS.

Reading of the Dry-bulb Thermometer.	Factor.	Reading of the Dry-bulb Thermometer.	Factor.	Reading of the Dry-bulb Thermometer.	Factor.	Reading of the Dry-bulb Thermometer.	Factor.	Reading of the Dry-bulb Thermometer.	Factor.	Reading of the Dry-bulb Thermometer.	Factor.
°		°		°		°		°		°	
20	8·1	32	3·3	44	2·2	56	2·0	68	1·8	80	1·7
21	7·9	33	3·0	45	2·2	57	1·9	69	1·8	81	1·7
22	7·6	34	2·8	46	2·1	58	1·9	70	1·8	82	1·7
23	7·3	35	2·6	47	2·1	59	1·9	71	1·8	83	1·7
24	6·9	36	2·5	48	2·1	60	1·9	72	1·8	84	1·7
25	6·5	37	2·4	49	2·1	61	1·9	73	1·8	85	1·7
26	6·1	38	2·4	50	2·1	62	1·9	74	1·7	86	1·7
27	5·6	39	2·3	51	2·0	63	1·9	75	1·7	87	1·6
28	5·1	40	2·3	52	2·0	64	1·9	76	1·7	88	1·6
29	4·6	41	2·3	53	2·0	65	1·8	77	1·7	89	1·6
30	4·2	42	2·2	54	2·0	66	1·8	78	1·7	90	1·6
31	3·7	43	2·2	55	2·0	67	1·8	79	1·7		

The dew-point being thus found for each individual observation, the mean is taken for each day (as defined from midnight to midnight), and this mean is corrected by application of the elements in the *Phil. Trans.*, 1848, part I.

The thermometers exhibiting the lowest temperature on the grass, and the highest and lowest temperatures of the water of the Thames, are described in the Introduction, 1847, pages lxix and lxxi. They are occasionally verified. They are read at 21^h (9^h A.M.) every day; their readings are placed opposite to the day preceding the civil day on which the scales are actually read. The thermometer for the highest temperature in the sunshine is a mercurial thermometer with blackened bulb, of Negretti and Zambra's construction: it is read at 9^h P.M. every evening.

The thermometer for the minimum temperature on the grass was out of order on January 22, 23; March 21; April 2, 7, 9, 12, 27, 30; May 3, 5, 7; July 13, 14, 18; September 27; October 10; November 8.

The thermometer for the maximum temperature in the sun was out of order on June 12.

The thermometer for the maximum temperature in the water of the Thames was out of order from February 6 to 12; on April 10; May 22 to 28; October 23 to November 5; that for the minimum temperature was out of order on the same days.

The mean daily value of the difference between dew-point temperature and air-temperature is the difference between the two numbers in the sixth and seventh columns. The Greatest and Least are the greatest and least among the differences corresponding to the times of observation in the civil day, or they are found from the absolute maxima and minima, as determined by comparing the observations of the self-registering wet-bulb thermometers with those of the self-registering dry-bulb thermometers.

The difference between the mean temperature for the day and the mean for the same day of the year on an average of forty-three years, is found by comparison with a table of results deduced by Mr. Glaisher from forty-three years' observations, made at the Royal Observatory, ending 1856.

Osler's Anemometer is described in the Introduction, 1847, page lxxi. Little explanation of the results deduced from it appears to be necessary. It may be understood generally that the greatest pressure occurred in gusts of short duration.

Whewell's Anemometer is described in the Introduction, 1847, page lxxii. The amount of movement of air here exhibited is to be understood as from 22^h to 22^h (10^h A.M. to 10^h A.M.), the numbers being placed opposite to the day preceding the civil day on which the instrument is read.

Robinson's Anemometer (used in the latter part of the year) is a self-registering Anemometer, constructed on the principles described in the Transactions of the Royal Irish Academy, vol. xxii. It is furnished with four hemispherical cups (each being 3·75 inches in diameter), attached to the extremities of two arms at right angles to each other, and revolving in a horizontal plane by the excess of pressure of the wind on their concave over that on their convex surfaces. The distance between the centres of opposite cups is 13·45 inches, and their centres describe 42·24 inches in each revolution, indicating a horizontal movement of the air of 126·72 inches for each revolution, and of one mile for 500 revolutions. The accuracy of this theory has been verified by experiments made in 1860. The horizontal arms are connected with a vertical spindle, upon which is an endless screw, working in a toothed wheel connected with a train of wheels, furnished with indices capable of registering one mile and decimal multiples of a mile, up to 1000 miles. The instrument is read off every day at 22^h.

The register of rain is read at 9^h P.M. from Crosley's Rain-gauge, described in page lxxv of the Introduction, 1847. If, however, there appears to be any doubt as to the correctness of the results, reference is made to the Rain-gauge No. 2, described in the same place.

For understanding the divisions of time under the heads of Electricity and Weather, the following remarks are necessary :—The day is divided by columns into two parts (from midnight to noon, and from noon to midnight), and each of these parts is roughly subdivided into two or three parts by colons (:). Thus, when there is a single colon in the first column, it denotes that the remarks before it apply (roughly) to the interval from midnight to 6 A.M., and those following it to the interval from 6 A.M. to noon. When there are two colons in the first column, it is to be understood that the twelve hours are divided into three nearly equal parts of four hours each. And similarly for the second column.

The Electrical Apparatus is described in page lxxvii of the Introduction, 1847. The following is the explanation of the notation employed, it being premised that the quality of the Electricity is always to be supposed positive when no indication of quality is given :—

g cur.	denotes	*galvanic currents*	N	denotes	*negative*	s	denotes	*strong*	v	denotes	*variable*
m	..	*moderate*	P	..	*positive*	sp	..	*sparks*	w	..	*weak*

The duplication of the letter denotes an intensity of the modification described : thus, s s is very strong ; v v, very variable.

The Clouds and Weather are described generally by Howard's Nomenclature ; the figure denotes the proportion of sky covered by clouds, the whole sky being represented by 10. The notation is as follows :—

a	denotes	*aurora borealis*	hl	denotes	*hail*	shs-r	denotes	*showers of rain*	h-sqs	denotes	*heavy squalls*
ci	..	*cirrus*	so-ha	..	*solar halo*	c-r	..	*continued rain*	fr-h-sqs	..	*frequent heavy squalls*
ci-cu	..	*cirro-cumulus*	l	..	*lightning*	c-h-r	..	*continued heavy rain*	sc	..	*scud*
ci-s	..	*cirro-stratus*	li-cl	..	*light clouds*	m-r	..	*misty rain*	li-sc	..	*light scud*
cu	..	*cumulus*	lu-co	..	*lunar corona*	fr-m-r	..	*frequent misty rain*	sl	..	*sleet*
cu-s	..	*cumulo-stratus*	lu-ha	..	*lunar halo*	sl-r	..	*slight rain*	sn	..	*snow*
d	..	*dew*	m	..	*meteor*	h-shs	..	*heavy showers*	sl-sn	..	*slight snow*
h-d	..	*heavy dew*	ms	..	*meteors*	fr-shs	..	*frequent showers*	s	..	*stratus*
f	..	*fog*	n	..	*nimbus*	fr-h-shs	.	*frequent heavy showers*	t	..	*thunder*
th-f	..	*thick-fog*	r	..	*rain*	li-shs	..	*light showers*	t-s	..	*thunder storm*
fr	..	*frost*	th-r	..	*thin rain*	oc-shs	..	*occasional showers*	v	..	*variable*
gt-glm		*great gloom*	oc-r	..	*occasional rain*	sq	..	*squall*	w	..	*wind*
h-fr	..	*hoar frost*	fr-r	..	*frozen rain*	sqs	..	*squalls*	st-w	..	*strong wind*
h	..	*haze*	h-r	..	*heavy rain*	fr-sqs	..	*frequent squalls*			

The foot notes show the means and extremes of readings, and their departure in each month from average values, as found from the preceding Eighteen Years' Observations ; those relating to Humidity have been calculated from the Second Edition of Glaisher's Hygrometrical Tables.

MONTH and DAY, 1859.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 18 Years.	WIND AS DEDUCED FROM ANEMOMETERS.						Rain in Inches read at 9h P.M.
			Dry.			Dew Point.	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning.						OSLER'S.					WHEWELL'S.	
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		General Direction. A.M.	General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Least.	Mean of 24 Obs.	Amount of Horizontal Movement of the Air on each Day.	
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
Jan. 1	..	30·289	46·0	40·7	43·1	42·1	46·2	40·0	41·5	41·5	1·0	3·1	0·0	+ 6·6	S ; SW	Calm	0·0	0·0	0·0	5	0·02
2	Greatest Declination S.	30·489	40·0	32·2	33·8	33·8	44·0	29·2	41·5	41·5	0·0	0·9	0·0	— 2·6	Calm	W	0·0	0·0	0·0	5	0·00
3	..	30·464	37·5	30·0	33·3	32·0	38·7	29·0	40·5	40·5	1·3	2·1	0·0	— 3·1	W	W	0·0	0·0	0·0	..	0·06
4	New, Apogee	30·380	43·5	32·0	38·9	38·9	44·0	29·5	40·9	40·9	0·0	1·4	0·0	+ 2·6	W N W	N	0·0	0·0	0·0	..	0·00
5	..	30·439	43·2	37·3	40·2	39·7	45·0	35·0	41·0	41·0	0·5	1·4	0·0	+ 4·1	N N E	Calm	0·0	0·0	0·0	..	0·00
6	..	30·287	36·8	31·7	34·0	31·6	44·0	31·5	41·0	41·0	2·4	3·8	0·3	— 2·0	N E	Calm	0·0	0·0	0·0	..	0·02
7	..	30·354	39·0	32·7	34·9	28·7	42·3	28·5	40·5	40·5	6·2	8·7	4·8	— 0·9	N N E	N N E	3·0	0·0	0·0	75	0·02
8	..	30·526	36·5	29·0	32·9	30·8	42·0	24·0	40·0	40·0	2·1	4·3	0·4	— 2·6	N E	Calm	0·0	0·0	0·0	10	0·00
9	..	30·618	39·2	28·5	33·6	26·8	44·0	22·0	39·2	39·2	6·8	10·8	4·5	— 1·8	Calm	SW	0·0	0·0	0·0	75	0·00
10	In Equator	30·554	42·0	32·3	37·1	36·2	46·0	27·0	39·4	39·4	0·9	2·5	0·0	+ 1·4	SW	WSW	3·0	0·0	0·0	185	0·00
11	..	30·389	49·8	38·3	44·2	37·3	54·3	33·5	39·5	39·5	6·9	10·9	5·3	+ 8·6	W	W	4·0	0·0	1·0	155	0·00
12	First Qr.	30·315	49·3	41·2	45·0	41·7	50·0	36·0	40·0	40·0	3·3	7·4	3·1	+ 9·4	WSW	NW	2·0	0·0	0·3	70	0·00
13	..	30·348	45·0	35·7	40·1	36·7	45·0	33·0	40·0	40·0	3·4	6·0	2·0	+ 4·5	N	N	2·0	0·0	0·0	15	0·00
14	..	30·300	40·0	33·1	35·2	32·8	45·0	30·0	40·0	40·0	2·4	4·1	0·5	— 0·4	Calm	Calm	0·0	0·0	0·0	15	0·00
15	..	30·161	44·5	32·5	38·3	34·3	52·2	28·0	39·6	39·6	4·0	6·2	1·8	+ 2·8	Calm	SW	2·0	0·0	0·0	60	0·00
16	Greatest Declination N.	30·011	40·1	29·5	34·7	27·2	41·3	23·0	39·6	39·6	7·5	10·4	5·1	— 0·8	SW	SW	2·0	0·0	0·0	115	0·00
17	..	29·816	49·0	38·0	45·0	44·0	52·7	29·0	39·6	39·6	1·0	4·0	0·0	+ 9·1	SW	SW	11·0	0·0	2·5	225	0·00
18	Perigee, Full	29·643	53·0	47·7	50·5	47·9	54·0	41·2	41·9	41·9	2·6	3·2	2·3	+14·2	SW	SW	15·0	4·0	5·0	270	0·12
19	..	29·873	51·0	36·0	43·4	41·0	51·8	38·5	42·1	42·1	2·4	5·5	0·7	+ 6·9	SW	Calm	3·0	0·0	0·0	50	0·00
20	..	30·055	51·0	32·3	42·0	40·0	57·0	25·0	42·1	42·1	2·0	5·5	1·8	+ 5·2	Calm	SW	4·0	0·0	1·0	205	0·02
21	..	29·963	48·5	37·5	44·2	41·8	49·5	32·0	42·4	42·4	2·4	6·1	0·0	+ 7·1	SW	SW	5·0	0·0	3·0	225	0·00
22	In Equator	29·810	49·5	35·5	43·0	40·2	49·0	..	43·2	43·2	2·8	6·5	1·1	+ 5·7	SW	SW	8·0	0·0	1·8	210	0·08
23	..	29·254	46·0	36·0	41·2	38·5	46·0	..	42·8	42·8	2·7	4·0	1·1	+ 3·7	SW	SW : NW	18·0	0·0	6·0	215	0·16
24	..	29·623	47·0	33·9	41·1	37·4	51·0	29·0	43·0	42·9	3·7	7·3	1·7	+ 3·3	SW	SW	5·0	0·0	0·5	200	0·00
25	Last Qr.	29·760	50·5	44·5	48·0	43·9	51·2	40·0	42·4	42·4	4·1	5·8	2·2	+10·0	SW	SW	16·0	0·0	4·0	235	0·00
26	..	29·686	49·0	36·7	41·4	33·7	51·0	32·5	42·8	42·8	7·7	9·9	4·6	+ 3·1	W N W	SW	15·0	0·0	6·0	..	0·09
27	..	29·631	51·7	39·0	45·1	40·0	62·0	35·0	42·6	42·6	5·1	7·6	2·9	+ 6·8	SW	SW	8·0	0·0	4·0	..	0·00
28	..	29·704	49·5	39·1	43·8	39·3	52·0	37·0	42·6	42·6	4·5	7·6	3·9	+ 5·7	SW	SW	1·0	0·0	0·0	..	0·00
29	Greatest Declination S.	29·605	50·5	38·7	45·0	42·8	52·4	33·2	42·8	42·8	2·2	4·4	0·9	+ 7·1	SW	SW	13·0	0·0	3·0	..	0·03
30	..	29·341	48·0	36·5	41·2	37·1	50·0	35·0	42·8	42·8	4·1	5·7	2·4	+ 3·6	SW	SW	3·0	0·0	0·3	..	0·18
31	Apogee	29·446	44·8	33·9	38·1	32·8	52·7	29·0	42·9	42·9	5·3	7·9	2·5	+ 0·8	SSW	SW	0·0	0·0	0·0	..	0·00
Means	..	30·037	45·5	35·5	40·4	37·1	48·6	31·9	41·3	41·3	3·3	5·7	1·8	+ 3·8	...	...	..	..	..	Sum 2620	Sum 0·80

BAROMETER READINGS.

The first maximum in the month was 30in·519 on the 2nd ; the first minimum in the month was 30in·247 on the 6th.
The absolute maximum ,, was 30in·640 on the 9th ; the second minimum ,, was 30in·291 on the 12th.
The third maximum ,, was 30in·379 on the 13th ; the third minimum ,, was 29in·619 on the 18th.
The fourth maximum ,, was 30in·081 on the 20th ; the absolute minimum ,, was 29in·141 on the 23rd.
The fifth maximum ,, was 29in·860 on the 25th ; the fifth minimum ,, was 29in 611 on the 25th.
The sixth maximum ,, was 29in·748 on the 29th ; the sixth minimum ,, was 29in·316 on the 30th.
The range in the month was 1in·499. The mean for the month was 30in·037, being 0in·290 *higher* than the average of the preceding 18 years.

TEMPERATURE OF THE AIR.

The highest in the month was 53°·0 on the 18th; the lowest was 28°·5 on the 9th; and the range in the month was 24°·5.
The mean ,, of all the highest daily readings was 45°·5, being 2°·5 *higher* than the average of the preceding 18 years.
The mean ,, of all the lowest daily readings was 35°·5, being 2°·0 *higher* than the average of the preceding 18 years.
The mean daily range was 10°·0, being 0°·5 *higher* than the average of the preceding 18 years.
The mean for the month was 40°·4, being 2°·3 *higher* than the average of the preceding 18 years.

MONTH and DAY, 1859.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Jan. 1	o	o	10, m.-r	10, m.-r
2	o	o	10, th.-f	2, ci, f : th.-f
3	o	o : w	10, th.-f	10, th.-f
4	o	o	10, th.-f : 10	10 : f
5	o	o	10, th.-f	10, th.-f, r : 7, ci.-cu, ci
6	o	o : w	10	10
7	o	o	3, ci, h	3, ci.-cu, ci : o
8	m	m	8, ci.-cu, ci, sl	8, ci.-cu, ci : 10, ci.-s
9	o	o	o, h.-f	o : 7, ci.-cu, ci : o
10	o	m : o	3, ci : 10, ci.-s	10, ci.-s : 5, ci.-s : lu.-ha
11	o	o	7, cu, cu-s, ci.-s : o	10, ci.-cu, ci : 10, ci.-s
12	o : w	o	10	10, ci.-cu, ci : lu.-cor
13	o	o : w	10, ci.-cu, cu.-s	10 : 9, ci.-cu, ci
14	o	o : m	10, ci.-s, h : gt.-glm	3, ci.-cu, ci : o : 8, cu.-s, ci.-s
15	o	m	3, ci.-cu, ci	3, ci, h : 10, ci.-cu, ci.-s
16	w	w	3, ci	7, ci.-cu, ci : lu.-ha
17	o		10, ci.-s, r	10, th.-r
18	o	s	10	10, th.-r : 10, r
19	o	o	9, ci.-cu, cu.-s, ci.-s	9, ci.-cu, ci : o
20	s		7, ci.-cu, ci, h.-f	7, cu, ci.-cu, ci
21	o	o o	10	10
22	o	o	10, r	10, oc.-r : o
23	N, w		10, h.-r	10, ci.-s, sc, h.-r : 10
24	o	o o	o, h.-f : 10, ci.-cu, ci	10
25	o	o	10, ci.-cu, cu.-s, ci.-s	10, ci.-cu, cu.-s, ci.-s : h.-r
26	o		3, ci, h : 2, ci.-cu, ci	5, ci.-cu, ci
27	o	o o	7, ci, sc	7, cu, ci.-cu, ci : o : 10, r
28	w	o	10, ci.-cu, ci	5, ci.-cu, ci : 10
29	w		7, ci.-cu, ci : 10	10
30	o	-	10, h.-r	10, cu.-s, ci.-s, hl, r : o
31	o : w		10	7, cu, ci.-cu, ci : o

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was $48^{\circ}\cdot 9$ on the 18th; and the lowest was $27^{\circ}\cdot 1$ on the 16th.

The mean ,, was $37^{\circ}\cdot 1$, being $1^{\circ}\cdot 8$ *higher* than the average of the preceding 18 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot 220$, being $0^{\text{in}}\cdot 016$ *greater* than the average of the preceding 18 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{\text{gr}}\cdot 6$, being $0^{\text{gr}}\cdot 2$ *greater* than the average of the preceding 18 years.

Degree of Humidity.—The mean for the month was 88 (that of Saturation being represented by 100), being 1 *less* than the average of the preceding 18 years.

Weight of a Cubic Foot of Air.—The mean for the month was 557 grains, being 3 grains *greater* than the average of the preceding 18 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·5.

WIND.

The proportions were of N. 6, S. 10, W. 14, and E. 1. The greatest pressure in the month was $18^{\text{lbs}}\cdot 0$ on the square foot on the 23rd.

RAIN.

Fell on 11 days in the month, amounting to $0^{\text{in}}\cdot 8$, as measured in the simple cylinder gauge partly sunk below the ground; being $1^{\text{in}}\cdot 0$ *less* than the average fall of the preceding 44 years.

MONTH and DAY, 1859.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shewn by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest.	Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Greatest.	Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 18 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	P.M.	Pressure in lbs. on the square foot. Greatest.	Least.	Mean of 24 Obs.	Whewell's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches read at 9h P.M.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Feb. 1	..	29·764	45·5	35·1	39·8	33·7	50·0	30·5	42·4	42·4	6·1	8·6	4·8	+ 2·6	SW ; NW	NW ; S W	10·0	0·0	1·5	..	0·00
2	..	29·329	46·8	39·0	42·6	34·5	55·0	30·0	41·7	41·7	8·1	9·9	7·1	+ 5·6	W	W ; NW	16·0	1·0	5·0	..	0·09
3	New	29·958	40·0	31·1	34·5	24·4	47·6	27·5	41·5	41·5	10·1	10·8	8·1	− 2·8	N	N	4·0	0·0	0·2	..	0·00
4	..	29·831	45·5	30·7	39·6	36·8	48·7	26·0	41·0	41·0	2·8	5·7	0·5	+ 1·9	S by W	SW	9·0	0·0	1·5	..	0·12
5	..	29·428	52·2	30·5	41·7	37·3	63·5	24·6	41·5	41·5	4·4	11·6	2·6	+ 3·3	SW	S	8·0	0·0	1·4	..	0·03
6	In Equator	29·165	46·0	37·5	40·2	35·5	49·0	35·0	..	..	4·7	8·8	2·5	+ 1·2	S	SW	4·0	0·0	0·2	..	0·19
7	..	29·218	46·0	32·5	37·9	34·0	58·5	28·8	..	..	3·9	10·3	1·9	− 1·3	Calm	SW	0·0	0·0	0·0	..	0·03
8	..	29·363	44·0	30·8	39·0	37·5	51·0	26·0	..	..	1·5	5·3	..	− 0·2	SE	S	2·0	0·0	0·0	..	0·01
9	..	29·289	48·4	39·3	44·2	41·7	49·0	37·2	..	..	2·5	5·1	1·7	+ 5·2	S	SW	15·0	0·0	3·5	215	0·14
10	First Qr.	29·364	51·0	40·5	44·5	41·5	58·0	41·0	..	..	3·0	6·9	1·3	+ 5·8	SW	SW	4·0	0·0	0·5	195	0·10
11	..	29·481	51·0	38·5	44·9	39·5	56·0	35·1	..	..	5·4	9·0	4·0	+ 6·4	SW	SW	8·0	0·5	2·5	245	0·02
12	..	29·592	52·2	40·0	45·8	41·8	50·5	37·7	..	..	4·0	9·2	2·9	+ 7·5	SW	SW	4·0	0·0	1·0	95	0·01
13	Greatest Declination N.	29·816	54·0	40·8	45·9	40·3	64·0	35·0	43·5	43·4	5·6	11·8	0·9	+ 7·7	Calm	S	0·0	0·0	0·0	70	0·00
14	..	29·791	49·0	36·7	43·0	39·9	54·0	35·0	43·3	43·2	3·1	7·1	1·8	+ 5·0	Calm	W ; NW	4·0	0·0	0·0	150	0·05
15	..	30·005	50·0	34·0	43·5	41·7	50·0	28·8	43·8	43·6	1·8	4·4	0·0	+ 5·4	SW	SW	2·0	0·0	0·2	235	0·00
16	Perigee	29·942	59·0	41·0	50·3	45·9	69·0	38·3	44·6	44·3	4·4	8·4	0·0	+12·2	SW	WSW	12·0	0·0	1·5	255	0·00
17	Full	29·995	56·8	43·3	49·6	45·2	61·0	36·5	45·3	45·0	4·4	7·0	2·8	+11·4	W	SW	8·0	0·0	1·0	250	0·00
18	..	30·169	51·7	37·5	42·6	31·8	56·0	33·0	45·3	45·0	10·8	14·3	7·3	+ 4·3	NW	NW	4·0	0·0	1·0	130	0·00
19	In Equator	30·221	49·2	33·2	40·6	35·4	66·3	27·0	45·3	45·0	5·2	11·1	0·4	+ 2·2	W	Calm	0·0	0·0	0·0	80	0·07
20	..	30·197	51·0	41·3	46·0	40·3	54·5	31·0	45·3	45·0	5·7	8·8	2·1	+ 7·5	W ; NW	N	0·0	0·0	0·0	35	0·00
21	..	30·211	56·0	39·8	46·9	38·8	70·2	37·0	45·3	45·0	8·1	16·8	4·4	+ 8·4	SW	SSW	0·0	0·0	0·0	125	0·00
22	..	30·218	54·0	41·3	46·6	40·0	68·0	38·8	45·8	45·5	6·6	9·6	5·3	+ 8·0	SW	SW ; N	2·0	0·0	0·2	120	0·00
23	..	30·464	48·0	35·9	41·5	32·7	64·0	30·0	45·0	44·8	8·8	13·9	5·3	+ 2·6	N	NW ; W	0·0	0·0	0·0	85	0·00
24	Last Qr.	30·268	54·0	32·9	42·7	36·6	68·0	27·5	44·8	44·5	6·1	13·8	3·7	+ 3·6	SW	W	2·0	0·0	0·0	105	0·00
25	..	30·140	53·0	31·8	42·0	36·6	68·0	28·0	44·6	44·4	5·4	12·8	3·6	+ 2·5	SW	SW	1·5	0·0	0·0	125	0·00
26	Greatest Declination S.	29·654	50·8	33·7	42·8	39·3	56·0	31·5	44·3	44·0	3·5	8·4	2·1	+ 3·1	SW	WSW	10·0	0·0	1·5	280	0·00
27	..	29·970	52·0	38·2	45·2	35·3	60·0	36·5	44·1	43·9	9·9	14·8	6·7	+ 5·4	NW	NW	9·0	0·0	2·7	105	0 00
28	Apogee	30·181	54·5	30·7	43·3	38·4	71·2	24·4	44·3	44·0	4·9	13·8	2·7	+ 3·3	W	SW	2·0	0·0	0·0	115	0·00
Means	..	29·823	50·4	36·3	43·1	37·7	58·5	32·1	43·9	43·7	5·4	9·9	3·1	+ 4·6	...	...	..	..	..	Sum 3015	Sum 0·86

BAROMETER READINGS.

The first maximum in the month was $29^{\text{in}}\cdot816$ on the 1st; the first minimum in the month was $29^{\text{in}}\cdot259$ on the 2nd.

The second maximum ,, was $30^{\text{in}}\cdot082$ on the 3rd; the absolute minimum ,, was $29^{\text{in}}\cdot149$ on the 6th.

The third maximum ,, was $29^{\text{in}}\cdot442$ on the 8th; the third minimum ,, was $29^{\text{in}}\cdot235$ on the 9th.

The fourth maximum ,, was $30^{\text{in}}\cdot086$ on the 17th; the fourth minimum ,, was $29^{\text{in}}\cdot910$ on the 17th.

The absolute maximum ,, was $30^{\text{in}}\cdot503$ on the 23rd; the fifth minimum ,, was $29^{\text{in}}\cdot570$ on the 26th.

The range in the month was $1^{\text{in}}\cdot354$.

The mean for the month was $29^{\text{in}}\cdot823$, being $0^{\text{in}}\cdot042$ *higher* than the average of the preceding 18 years.

TEMPERATURE OF THE AIR.

The highest in the month was 59°·0 on the 16th; the lowest was 30°·5 on the 5th; and the range in the month was 28°·5.

The mean ,, of all the highest daily readings was 50°·4, being 6°·0 *higher* than the average of the preceding 18 years.

The mean ,, of all the lowest daily readings was 36°·3, being 3°·1 *higher* than the average of the preceding 18 years.

The mean daily range was 14°·1, being 3°·0 *higher* than the average of the preceding 18 years.

The mean for the month was 43°·1, being 4°·8 *higher* than the average of the preceding 18 years.

MONTH and DAY, 1859.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Feb. 1	o	o : m	7, ci.-cu, ci, h	7, ci.-cu, ci : 10, r
2	o	o	0, h	7, cu, ci.-cu, ci : 10, r
3	o	o : w	2, ci, h	2, ci
4	o	o	7, ci.-cu, cu.-s, ci.-s : 10, r	10 : h.-r
5	o	o	7, ci.-cu, ci	7, cu, ci.-cu, ci : 10, r
6	o	o	10, ci.-cu, ci	10, ci.-cu, ci, r : 3, ci.-s
7	w	s P, s N : o	9, ci.-cu, ci, h.-f	9, cu, ci.-cu, ci : 10, hl, r : 0
8	w	N : w	10, ci.-cu, ci.-s	10 : th.-r
9	w : s, N	w	10, ci.-s, sc	10, h.-r : th.-r
10	o	N, w : o	10, ci.-s : h.-shs.-r : 9, ci.-cu, ci	10, ci.-cu, cu.-s, ci.-s : fr.-shs.-r, lu.-co
11	o	o	2, ci.-cu, ci	10, ci.-cu, ci : h.-r : 4, ci.-s, sc
12			10 : th.-r	10, r : 9, ci.-cu, ci.-s : lu.-co
13	o	o	7, ci.-cu, ci	7, cu, ci.-cu : 0
14	o : s, N	w	10, ci.-cu, cu.-s	10, th.-r : 5, lu.-co : 0
15	o	o	10, ci.-s : th.-r	10 : 9, ci.-cu, cu.-s
16	o	o	10	9, ci.-cu, cu.-s, ci.-s
17	o	w : o	0, h : 10, ci.-cu, cu.-s, ci.-s	10, ci.-cu, cu.-s, ci.-s, h.-sh.-r : th.-r
18	o	w : o	0, h	7, cu, ci.-cu, ci : 10
19	w	N, w : o	7, ci.-s, th.-f, h.-f	6, cu, ci.-cu, ci : 10, th.-r : 10
20	o : w	o	10, f	10, f
21	o	o : w	0, h	7, cu, ci.-cu, ci : 10
22	w	s	10, th.-r	10 : 0
23	m	m	2, ci	2, ci, h
24	s	s	7, ci.-cu, cu.-s : 0, h	0
25	s	s	2, h	2, ci.-cu, ci
26	v	s N, sps, g cur : o	0 : 10	10 : 5, ci.-cu, ci : oc.-r
27	o	o	10, ci.-cu, ci.-s	10, cu, ci.-cu, ci.-s : 0
28	v	v	0, h.-f	0, h

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 48°·5 on the 16th; and the lowest was 22°·4 on the 3rd.

The mean ,, was 37°·7, being 3°·3 *higher* than the average of the preceding 18 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot225$, being $0^{\text{in}}\cdot024$ *greater* than the average of the preceding 18 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{\text{gr}}\cdot6$, being $0^{\text{gr}}\cdot3$ *greater* than the average of the preceding 18 years.

Degree of Humidity.—The mean for the month was 81 (that of Saturation being represented by 100), being 5 *less* than the average of the preceding 18 years.

Weight of a Cubic Foot of Air.—The mean for the month was 550 grains, being 4 grains *less* than the average of the preceding 18 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·3.

WIND.

The proportions were of N. 3, S. 11, W. 14, and E. 0. The greatest pressure in the month was $16^{\text{lbs}}\cdot0$ on the square foot on the 2nd.

RAIN.

Fell on 12 days in the month, amounting to $0^{\text{in}}\cdot9$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{\text{in}}\cdot7$ less than the average fall of the preceding 44 years.

MONTH and DAY, 1859.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9h A.M.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 18 Years.	WIND AS DEDUCED FROM ANEMOMETERS. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 24 Obs.	Whewell's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches read at 9h P.M.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
Mar. 1	. .	30·165	56·2	41·3	46·9	38·9	73·5	36·0	44·6	44·3	8·0	18·2	2·1	+ 6·8	W	SW	2·0	0·0	0·0	110	0·00
2	. .	30·017	53·8	36·7	45·8	42·9	64·5	31·2	45·0	44·7	2·9	8·8	1·2	+ 5·8	WSW	SW	2·5	0·0	0·3	155	0·00
3	. .	30·081	59·0	44·0	51·0	45·2	74·5	40·0	45·3	45·0	5·8	11·2	2·0	+ 11·1	SW	SW	2·0	0·0	0·0	155	0·00
4	New	30·114	63·0	49·3	54·8	51·1	78·0	46·0	46·6	46·2	3·7	10·1	1·4	+ 14·9	SW	WSW	2·0	0·0	0·2	95	0·00
5	In Equator	30·162	63·5	44·0	52·0	45·5	81·0	41·0	47·9	47·4	6·5	16·5	2·9	+ 12·0	W	WSW	1·8	0·0	0·0	190	0·00
6	. .	30·102	59·0	42·5	49·9	43·4	78·2	41·0	48·3	47·8	6·5	13·2	2·4	+ 9·8	WSW	SW ; SSW	2·0	0·0	0·0	165	0·00
7	. .	29·620	59·0	43·9	49·8	44·6	71·7	45·5	49·0	48·3	5·2	14·4	1·1	+ 9·7	SW	SW	5·0	0·0	1·0	245	0·04
8	. .	29·695	49·5	34·5	40·5	32·5	69·0	33·7	48·8	48·2	8·0	16·2	6·0	+ 0·4	SW	WNW	12·0	0·0	3·0	170	0·01
9	. .	30·273	47·5	32·7	38·7	27·4	61·0	27·5	47·9	47·3	11·3	15·6	9·6	− 1·5	W ; N	Calm	4·0	0·0	0·2	80	0·00
10	. .	30·214	53·0	29·7	40·8	34·0	70·0	25·3	47·8	47·3	6·8	14·8	5·5	+ 0·5	Calm	SW	2·0	0·0	0·0	145	0·00
11	. .	29·695	55·4	36·0	46·6	42·2	68·0	29·0	47·9	47·4	4·4	12·6	2·4	+ 6·1	SW	SW	13·0	0·0	6·0	. .	0·06
12	Last Quarter Greatest Dec. N	29·588	58·0	50·0	53·5	49·6	62·8	41·7	47·8	47·2	3·9	5·5	3·6	+ 12·9	SW	SW	13·0	5·0	8·0	. .	0·02
13	. .	29·521	58·0	50·0	52·2	48·1	59·7	49·1	47·3	46·8	4·1	7·4	2·8	+ 11·2	SW	SW	12·0	0·0	5·0	. .	0·08
14	. .	29·364	53·3	49·2	50·6	48·2	53·0	45·0	47·8	47·3	2·4	3·4	0·2	+ 9·3	SSW	SSW	10·0	0·0	2·0	. .	0·26
15	. .	29·276	50·5	38·5	44·2	36·5	60·5	47·0	47·8	47·3	7·7	10·1	3·0	+ 2·7	SW	W	14·0	0·0	7·0	. .	0·07
16	Perigee	29·804	55·2	42·0	48·3	42·6	63·0	37·0	48·3	47·8	5·7	10·4	3·6	+ 6·6	SW	SW	5·0	0·0	1·5	. .	0·00
17	. .	29·537	53·2	42·0	47·6	43·8	58·5	40·3	48·8	48·2	3·8	8·2	1·1	+ 5·8	SW	SW	15·0	0·0	8·0	. .	0·10
18	In Equator ; Full	29·591	55·0	38·3	45·2	37·2	72·0	33·2	49·1	48·4	8·0	15·6	3·7	+ 3·4	WSW	NW	4·0	0·0	0·5	. .	0·00
19	. .	30·131	53·8	35·7	43·7	35·7	74·7	32·0	49·1	48·4	8·0	13·9	6·0	+ 1·9	N	NW ; W	0·0	0·0	0·0	60	0·00
20	. .	30·122	56·6	37·0	46·4	39·1	71·2	33·2	49·1	48·4	7·3	15·6	2·8	+ 4·5	WSW	SW	5·0	0·0	1·6	245	0·00
21	. .	29·804	49·0	37·7	42·1	37·0	60·2	. .	49·1	48·4	5·1	9·9	1·1	+ 0·2	SW	N	6·0	0·0	1·0	100	0·19
22	. .	30·145	49·0	34·0	40·8	29·9	68·0	30·0	48·3	47·8	10·9	17·6	4·5	− 1·1	N	N ; NW	4·0	0·0	0·5	60	0·00
23	. .	29·994	49·8	39·2	44·5	39·8	52·0	35·0	47·8	47·3	4·7	8·8	2·9	+ 2·5	NW	NW ; W	1·0	0·0	0·0	80	0·00
24	. .	29·906	53·0	44·0	48·4	43·5	60·0	41·0	47·8	47·3	4·9	8·8	3·1	+ 6·3	NW	NW	2·0	0·0	0·5	115	0·00
25	Greatest Declination S	29·848	58·2	46·9	51·2	42·7	69·0	45·0	48·0	47·7	8·5	12·5	4·2	+ 9·0	NW	NW	3·5	0·0	1·0	105	0·00
26	Last Qr.	29·762	55·2	45·7	49·6	38·8	68·8	41·8	48·0	47·4	10·8	15·2	5·7	+ 7·3	W	W	3·0	0·0	0·8	115	0·00
27	Apogee	29·771	56·0	43·3	48·8	43·1	65·0	40·0	48·3	47·8	5·7	9·6	2·9	+ 6·4	SW	S by W	3·0	0·0	0·5	170	0·00
28	. .	29·370	56·0	45·5	49·6	42·9	67·0	42·0	48·3	47·8	6·7	11·8	2·7	+ 7·0	S	SW	6·0	0·0	1·2	230	0·00
29	. .	29·044	56·5	40·7	47·4	38·2	74·0	42·0	48·8	48·2	9·2	15·2	3·2	+ 4·6	SW	Calm	6·0	0·0	2·8	70	0·00
30	. .	29·272	43·0	32·1	35·3	33·1	47·0	33·5	48·8	48·2	2·2	6·4	0·0	− 7·7	Calm	W ; N	2·0	0·0	0·3	85	0·52
31	. .	29·971	42·0	28·9	34·0	25·7	58·0	17·0	48·1	47·6	8·3	13·9	4·6	− 9·4	N	N	2·0	0·0	0·8	45	0·00
Means	. .	29·806	54·2	40·5	46·4	40·1	66·3	37·4	47·9	47·4	6·4	12·0	3·2	+ 5·7	. . .	. . .	. .	. .	. .	Sum 2990	Sum 1·35

BAROMETER READINGS.

The first maximum in the month was 30^{in}·186 on the 1st; the first minimum in the month was 30^{in}·018 on the 2nd.
The second maximum ,, was 30^{in}·197 on the 5th; the second minimum ,, was 29^{in}·549 on the 8th.
The absolute maximum ,, was 30^{in}·347 on the 9th; the third minimum ,, was 29^{in}·089 on the 15th.
The fourth maximum ,, was 29^{in}·821 on the 16th; the fourth minimum ,, was 29^{in}·432 on the 17th.
The fifth maximum ,, was 30^{in}·212 on the 19th; the fifth minimum ,, was 29^{in}·746 on the 21st.
The sixth maximum ,, was 30^{in}·162 on the 22nd; the absolute minimum ,, was 29^{in}·035 on the 29th.
The range in the month was 1^{in}·312.
The mean for the month was 29^{in}·806, being 0^{in}·006 *higher* than the average of the preceding 18 years.

TEMPERATURE OF THE AIR.

The highest in the month was 63°·5 on the 5th; the lowest was 28°·9 on the 31st; and the range in the month was 34°·6.
The mean ,, of all the highest daily readings was 54°·2, being 4°·4 *higher* than the average of the preceding 18 years.
The mean ,, of all the lowest daily readings was 40°·5, being 5°·5 *higher* than the average of the preceding 18 years.
The mean daily range was 13°·7, being 1°·1 *lower* than the average of the preceding 18 years.
The mean for the month was 46°·4, being 4°·8 *higher* than the average of the preceding 18 years.

MONTH and DAY, 1859.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Mar. 1	w	w : s	0	0, h : 10, ci.-cu, ci
2	v	v	10 : 7, ci.-cu, ci	8, s, ci.-s : 10
3	s	s	8, ci.-cu, ci.-s	8, cu, ci.-cu, ci.-s
4	w	w	10 : 8, ci.-cu, ci	7, ci.-cu, ci.-s : 10, ci.-s
5	w	w : s	7 : 0	0, h
6	v	v	7, ci.-s	5, ci.-s : 10 : [illegible]
7	0	0 : w	10 : 7, ci.-cu, ci	7, cu, ci.-cu, ci : 10, r
8	ss, sps, g cur	ss, sps, g cur	10, r : sh.s.-hl.-r	2, cu, ci.-cu : sh.s.-hl.-r : [illegible]
9	0	0	5, ci, h	8, ci.-cu, cu.-s, ci.-s : 0, f
10	0	0 : m	0, h	3, ci.-cu, ci : 0
11	w	0	10, ci.-s	10, ci.-cu, cu.-s, ci.-s
12	0	0	10	10
13	0	0	10, r	10 : r
14	0 : s	s : 0	10, r	10, r : 7, ci.-cu, cu.-s
15	0 : s N	s	10, cu, ci.-cu, ci, oc.-r	10, h.-shs.-hl.-r
16	0	0	10, ci.-s	10, ci.-cu, cu.-s, ci.-s : lu.-ha
17	0	0 : w	9, th.-r	9 : 10, h.-r
18	0	0	7, ci.-s	7, cu, ci.-cu, ci : 0, f
19	0	0 : w	2, ci.-cu, ci	2, cu, ci.-cu, ci : 5, ci.-s, h
20	0	0 : w	10, ci.-s	10, ci.-cu, ci.-s : r
21	0	w	10, r	10, ci.-cu, ci : 10
22	0 : w	0	0, h	3, ci.-s : 10, ci.-cu., cu.-s, ci.-s : f
23	0	0 : m	10, ci.-s	10 : 0, f
24	0	0	10	10
25	0 : w	0	10 : 7, ci.-cu, ci	10, cu, ci.-cu, ci.-s
26	w	w N : w	9, ci.-cu, ci.-s	9 : 10
27	s	s	9	10, ci.-cu, ci.-s
28	w	s N : w	10	10, r : 5, ci.-s.
29	0	0 : w	7, cu, ci.-cu	7 : r : 10
30	s P, s N, sps, g cur	s P, s N, sps, g cur	10, ci, h	10, sh.s.-r.-sl : sn : 5, ci.-s
31	0 : w N	0	7, ci.-cu, ci.-s : 0	1, ci : 8, ci.-cu, ci : 0

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 53°·5 on the 4th; and the lowest was 23°·5 on the 9th.
The mean ,, was 40°·1, being 3°·9 *higher* than the average of the preceding 18 years.

Elastic Force of Vapour.—The mean for the month was 0in·247, being 0in·032 *greater* than the average of the preceding 18 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 2gr·8, being 0gr·3 *greater* than the average of the preceding 18 years.

Degree of Humidity.—The mean for the month was 79 (that of Saturation being represented by 100), being 3 *less* than the average of the preceding 18 years.

Weight of a Cubic Foot of Air.—The mean for the month was 546 grains, being 5 grains *less* than the average of the preceding 18 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·2.

WIND.

The proportions were of N. 5, S. 11, W. 15, and E. 0. The greatest pressure in the month was 15[illegible]0 on the square foot on the 17th.

RAIN.

Fell on 10 days in the month, amounting to 1in·4 as measured in the simple cylinder gauge partly sunk below the ground; being 0in·1 *less* than the average fall of the preceding 44 years.

MONTH and DAY, 1859.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shewn by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames at Greenwich, by Self-Registering Thermometers read at 9h A.M. next morning. Highest.	Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Greatest.	Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 18 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	P.M.	Pressure in lbs. on the square foot. Greatest.	Least.	Mean of 24 Obs.	Whewell's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches read at 9h P.M.
		in	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
April 1	In Equator	30·068	48·1	25·3	37·3	28·3	64·0	18·0	47·3	46·8	9·0	16·8	5·4	− 6·3	Calm	SW	2·0	0·0	0·2	200	0·00
2	. .	29·858	53·0	37·0	45·6	45·1	54·0	. .	46·7	46·3	0·5	4·6	0·0	+ 0·5	SW	SW	9·0	0·0	3·0	175	0·05
3	New	29·998	65·0	44·0	52·3	48·3	77·0	40·0	48·0	47·4	4·0	11·5	1·3	+ 7·8	SW	W	4·0	0·0	1·0	210	0·00
4	. .	29·985	68·0	47·5	56·0	43·8	86·0	40·8	48·2	47·6	12·2	22·7	6·2	+ 11·2	SW	SW	3·5	0·0	0·8	150	0·00
5	. .	29·997	69·0	43·5	55·6	44·3	83·0	34·6	48·8	48·2	11·3	22·3	2·4	+ 10·5	SW	Calm	3·0	0·0	0·5	110	0·00
6	. .	29·997	79·0	45·5	61·1	48·2	101·0	44·8	50·3	49·5	12·9	27·5	1·0	+ 15·7	SW	S	0·0	0·0	0·0	80	0·00
7	. .	29·737	78·8	49·0	63·0	49·5	100·0	. .	51·8	50·7	13·5	28·9	3·8	+ 17·5	SE	SW	1·5	0·0	0·0	150	0·00
8	Greatest Declination N	29·639	60·0	48·5	52·9	49·3	61·5	44·2	53·3	52·2	3·6	10·6	1·2	+ 7·4	SW	SW	4·5	0·0	2·0	240	0·11
9	. .	29·466	61·1	50·1	53·3	47·2	77·0	. .	54·2	52·7	6·1	13·3	1·4	+ 7·9	SW	SW	9·0	0·0	1·8	215	0·03
10	First Qr.	29·162	59·8	46·4	49·3	42·1	63·5	42·0	. .	. .	7·2	15·6	4·4	+ 4·2	SW	SW	7·0	0·0	2·0	200	0·00
11	Perigee	29·160	59·6	39·5	47·0	40·2	81·0	34·0	53·3	52·2	6·8	15·2	2·1	+ 2·0	SW	SW ; N	3·0	0·0	0·5	125	0·25
12	. .	29·453	52·0	37·8	43·1	34·6	70·0	. .	52·8	51·7	8·5	16·8	0·9	− 1·8	N	S	2·0	0·0	0·2	140	0·17
13	. .	29·261	47·6	36·5	40·4	35·3	55·0	36·0	52·6	51·7	5·1	8·8	2·4	− 4·8	NW	N	3·0	0·0	1·2	55	0·31
14	. .	29·172	54·0	30·8	42·2	39·7	75·5	27·0	52·3	51·2	2·5	14·8	1·5	− 3·3	Calm	SW	8·0	0·0	1·4	205	0·21
15	In Equator	29·236	47·0	34·1	37·4	31·1	57·0	35·0	51·8	50·8	6·3	11·7	1·7	− 8·3	NW	NW	13·0	0·0	3·5	170	0·08
16	. .	29·496	48·8	32·3	37·5	31·7	64·4	27·0	50·8	50·0	5·8	16·8	2·2	− 8·5	W	NW	7·0	0·0	1·5	150	0·04
17	Full	29·695	48·7	30·7	37·5	29·2	63·4	25·0	48·3	47·8	8·3	19·1	3·8	− 8·7	W ; NW	NW ; Calm	4·0	0·0	0·5	40	0·00
18	. .	29·671	45·0	31·5	38·2	29·0	51·6	26·0	48·0	47·3	9·2	22·3	7·0	− 8·2	Calm	W ; N	1·0	0·0	0·0	55	0·00
19	. .	29·476	53·0	28·5	39·9	31·2	72·0	24·0	47·3	46·8	8·7	20·6	3·2	− 6·6	N	ESE	1·5	0·0	0·0	85	0·00
20	. .	29·358	53·7	31·7	42·7	35·0	72·0	27·8	48·0	47·4	7·7	20·2	4·3	− 4·0	NE	NE	2·0	0·0	0·3	105	0·00
21	Greatest Declination S.	29·467	53·5	34·8	43·5	32·7	74·0	33·0	48·1	47·5	10·8	18·7	1·0	− 3·5	N	NW ; N	1·5	0·0	0·0	70	0·00
22	. .	29·613	56·0	29·7	42·5	33·1	70·0	25·0	48·1	47·5	9·4	20·8	6·0	− 5·0	NNE	NE	0·0	0·0	0·0	50	0·00
23	. .	29·695	53·5	30·3	42·4	33·9	69·8	27·5	48·3	47·8	8·5	18·1	4·1	− 5·2	Calm ; E	NE	4·0	0·0	1·5	175	0·00
24	Apogee	29·556	53·0	40·5	45·6	43·3	55·0	39·0	48·3	47·8	2·3	6·8	2·2	− 2·0	E	SE	4·5	0·0	1·3	90	0·36
25	Last Qr.	29·676	56·5	45·8	49·8	48·6	54·0	42·0	48·3	47·8	1·2	5·8	0·9	+ 2·2	SE	E ; SSE	3·0	0·0	0·6	80	0·30
26	. .	29·970	64·5	44·7	52·6	46·9	85·0	36·0	48·8	48·2	5·7	13·7	1·9	+ 5·0	S	S ; E	2·5	0·0	0·3	115	0·00
27	. .	29·788	49·8	43·5	45·2	41·4	54·8	. .	48·3	47·8	3·8	8·8	1·0	− 2·8	E	NE	10·0	0·0	4·0	220	0·00
28	. .	29·421	52·8	42·0	46·8	45·2	58·0	43·0	49·8	49·1	1·6	5·5	0·8	− 1·7	NE	NE	10·0	0·0	3·8	115	0·12
29	In Equator	29·633	67·0	47·5	53·7	45·0	86·0	48·0	51·0	50·0	8·7	16·9	1·9	+ 4·6	SW	SW ; E	3·0	0·0	0·3	120	0·00
30	. .	29·703	48·3	42·5	44·1	41·4	52·0	. .	50·3	49·5	2·7	4·2	0·9	− 5·4	ENE	ENE	3·0	0·0	0·8	105	0·14
Means	. .	29·614	56·9	39·1	46·6	39·8	69·6	34·2	49·8	49·0	6·8	15·3	2·6	+ 0·3	. . .	. . .	. .	. .	. .	Sum 4000	Sum 2·17

BAROMETER READINGS.

The absolute maximum in the month was $30^{\text{in}}{\cdot}157$ on the 1st; the first minimum in the month was $29^{\text{in}}{\cdot}800$ on the 2nd.
The second maximum ,, was $30^{\text{in}}{\cdot}035$ on the 6th; the second minimum ,, was $29^{\text{in}}{\cdot}094$ on the 11th.
The third maximum ,, was $29^{\text{in}}{\cdot}567$ on the 12th; the third minimum ,, was $29^{\text{in}}{\cdot}204$ on the 13th.
The fourth maximum ,, was $29^{\text{in}}{\cdot}344$ on the 14th; the absolute minimum ,, was $28^{\text{in}}{\cdot}859$ on the 14th.
The fifth maximum ,, was $29^{\text{in}}{\cdot}764$ on the 17th; the fifth minimum ,, was $29^{\text{in}}{\cdot}346$ on the 20th.
The sixth maximum ,, was $29^{\text{in}}{\cdot}716$ on the 23rd; the sixth minimum ,, was $29_{\text{in}}{\cdot}531$ on the 24th.
The seventh maximum ,, was $30^{\text{in}}{\cdot}005$ on the 26th; the seventh minimum ,, was $29^{\text{in}}{\cdot}416$ on the 28th.
The range in the month was $1^{\text{in}}{\cdot}298$.
The mean for the month was $29^{\text{in}}{\cdot}614$, being $0^{\text{in}}{\cdot}125$ *lower* than the average of the preceding 18 years.

TEMPERATURE OF THE AIR.

The highest in the month was 79°·0 on the 6th; the lowest was 25°·3 on the 1st; and the range in the month was 53°·7.
The mean ,, of all the highest daily readings was 56°·9, being 0°·1 *lower* than the average of the preceding 18 years.
The mean ,, of all the lowest daily readings was 39°·1, being 0°·3 *higher* than the average of the preceding 18 years.
The mean daily range was 17°·8, being 0°·4 *lower* than the average of the preceding 18 years.
The mean for the month was 46°·6, being 0°·1 *higher* than the average of the preceding 18 years.

MONTH and DAY, 1859.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
April 1	0	w : 0	0, h	3, cu, ci.-cu, ci : 10, ci.-cu, ci.-s, r
2	0	0	10, r	10, th-r
3	0 : w	w : 0	7, ci-s	7, cu, ci.-cu, ci
4	0	0 : m	3, ci	3, ci : 0
5	0	0 : w	10, ci.-s, h	10, ci. h : 0
6	w	0	10, ci.-s, h : 0	0
7	0	m	0	0 : 7, ci.-s, ci
8	0	0	7, cu, ci.-cu, ci : 10 : r	10, r
9	0	0 : w	10, th-r	7, ci.-cu, ci.-s
10	0	0	10, r	10, ci.-cu, ci.-s : 0
11	s	s N : 0	3, cu, ci.-cu : h.-sh.-r	10, fr.-sh.-r, r : 3
12	0	m : s N	0, h : 10, cu.-s, ci.-s	10 : r : h.-r
13	0	m	10, r	10, cu, ci.-cu, ci : 0
14	m	s N	7, cu, ci.-cu : 10	10, cu, cu.-s, ci.-s, r
15	0	s N, sps, g cur	8, cu, ci.-cu, ci : shs.-sn.-r	7, shs.-sl.-r : r
16	s P, s N, sps, g cur	s P, s N, sps, g cur	9, cu, ci.-cu, ci : shs.-sn.-sl.-hl	9, cu, ci.-cu : sn
17	0	0	5, cu, ci.-cu, ci	5, cu, ci.-cu, ci : 0
18	0 : m	0	10, ci.-s	10 : 0 : 5, ci
19	0	0 : s	8, ci.-s	8, s, ci.-s : 0
20	0 : s	m	5, ci.-cu	5, ci.-cu : 10
21	0	0	0, h	7, cu, cu.-s, ci.-s : [illegible] : [illegible]
22	0	m : 0	2, ci.-cu, ci	2, cu : [illegible]
23	0 : N w	w	3, ci.-cu, ci	3, ci.-cu, ci : 10, r : h.-r
24			10, h.-shs.-r	10, shs.-r : th-r
25			10, h.-r	10, fr.-shs.-r : 5
26	0	w : 0	10	7, cu, cu.-s, ci.-s : 10
27	0	0 : w	10, ci.-s	10, ci.-s
28	0	w : 0	10	10, r : fr.-shs.-r
29	0	w	7, cu, ci.-cu, ci	7, cu, ci.-cu, ci : 10
30	s	s N	10 : h.-r	10, h.-r

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 51°·9 on the 8th; and the lowest was 28°·1 on the 17th.

The mean ,, was 39°·8, being 0°·3 *lower* than the average of the preceding 18 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot237$, being $0^{in}\cdot012$ *less* than the average of the preceding 18 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{gr}\cdot8$, being $0^{gr}\cdot1$ *less* than the average of the preceding 18 years.

Degree of Humidity.—The mean for the month was 78 (that of Saturation being represented by 100), being 1 *less* than the average of the preceding 18 years.

Weight of a Cubic Foot of Air.—The mean for the month was 542 grains, being 2 grains *less* than the average of the preceding 18 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·9.

WIND.

The proportions were of N. 6, S. 10, W. 10, and E. 4. The greatest pressure in the month was $13^{lbs}\cdot0$ on the square foot on the 15th.

RAIN.

Fell on 13 days in the month, amounting to $2^{in}\cdot2$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{in}\cdot4$ *greater* than the average fall of the preceding 44 years.

ELECTRICITY.

April 24 and 25. The insulating lamp was not burning.

MONTH and DAY, 1859.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers.								Difference between the Dew Point Temperature and Air Temperature			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 18 Years.	Wind as deduced from Anemometers.						Rain in Inches read at 9h P.M.
			Dry.			Dew Point.	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers read at 9h A.M. in Morning						Osler's.					Whewell's.	
															General Direction.		Pressure in lbs. on the square foot.			Amount of Horizontal Movement of the Air on each Day.	
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Hours.		
		in.																			in.
May 1	..	29·688	53·8	41·1	45·3	37·3	68·5	41·0	50·3	49·5	8·0	16·4	3·9	— 4·7	NE	NE	4·0	0·0	0·5	115	0·00
2	New	29·786	56·0	40·5	46·7	35·8	73·0	38·8	50·3	49·5	10·9	17·8	4·4	— 3·8	NE	NE	7·0	0·0	1·8	140	0·00
3	..	29·741	57·8	40·5	47·4	37·1	74·0	..	50·6	49·9	10·3	17·6	4·8	— 3·5	NE	NE	3·2	0·0	1·0	125	0·00
4	..	29·622	62·5	40·2	48·8	40·6	82·8	34·0	51·0	50·0	8·2	16·9	4·1	— 2·5	NE	NE	3·5	0·0	1·0	110	0·00
5	Greatest Declination N	29·799	60·1	36·5	47·1	38·5	84·0	..	51·0	50·0	8·6	15·6	2·2	— 4·5	NE	E ; SE	2·0	0·0	0·0	25	0·00
6	..	29·932	62·5	33·1	47·8	41·4	86·2	26·0	51·3	50·4	6·4	16·0	2·1	— 5·7	SE	E	1·0	0·0	0·0	40	0·00
7	Perigee	29·857	72·0	39·5	56·4	47·9	88·0	..	51·0	50·8	8·5	18·4	2·6	+ 4·5	SE	SW	2·0	0·0	0·2	75	0·00
8	..	30·035	66·5	46·0	52·4	45·1	86·0	48·0	51·8	50·8	7·3	18·4	3·4	+ 0·6	Calm	NE ; Calm	2·0	0·0	0·0	40	0·30
9	First Qr.	30·060	63·0	38·0	50·3	43·1	82·8	30·0	52·8	51·7	7·2	17·2	2·9	— 1·3	Calm ; NE	E	3·0	0·0	0·5	80	0·00
10	..	29·975	56·0	42·7	47·4	41·1	62·0	40·0	54·7	53·2	6·3	10·8	2·3	— 4·0	NE	E	0·0	0·0	0·0	25	0·00
11	..	30·099	67·5	43·0	52·5	46·8	91·0	38·2	54·7	53·2	5·7	13·0	3·8	+ 1·2	NE	NE	1·0	0·0	0·0	50	0·00
12	In Equator	30·057	62·0	40·8	51·0	44·6	83·0	36·0	55·2	53·7	6·4	13·3	0·9	— 0·3	NE	NE	1·5	0·0	0·0	70	0·00
13	..	29·989	64·0	38·8	52·0	40·6	84·0	34·0	55·7	54·2	11·4	20·9	0·9	+ 0·6	NE	NE	4·5	0·0	1·0	140	0·00
14	..	29·950	66·5	39·7	52·7	44·5	87·3	34·0	56·4	55·2	8·2	15·7	0·7	+ 0·9	NE	NE	3·5	0·0	0·8	115	0·00
15	..	29·790	64·0	39·7	52·6	42·9	75·0	34·2	56·4	54·8	9·7	17·9	0·8	+ 0·4	NE	NE	3·5	0·0	0·8	140	0·00
16	Full	29·742	66·0	45·5	52·8	46·7	85·0	40·0	56·7	55·2	6·1	13·3	2·3	+ 0·2	NE	NE	3·0	0·0	0·5	150	0·00
17	..	29·635	52·5	48·5	50·3	48·7	52·5	45·0	56·7	55·2	1·6	2·6	0·8	— 2·5	NE	NE	2·0	0·0	0·2	110	0·32
18	..	29·577	57·0	48·5	51·6	50·6	57·0	44·6	56·2	54·8	1·0	2·2	0·0	— 1·5	NE	NE	1·0	0·0	0·0	100	0·07
19	Greatest Declination S	29·563	67·9	49·5	54·9	50·0	75·5	47·0	56·7	55·2	4·9	12·4	1·6	+ 1·6	NE	NE	2·0	0·0	0·2	85	0·40
20	..	29·593	61·2	49·5	54·0	51·2	74·4	47·6	56·7	55·2	2·8	6·8	0·2	+ 0·4	NE	NE	1·0	0·0	0·0	70	0·74
21	..	29·775	58·3	48·7	52·3	47·0	64·5	44·0	56·7	55·2	5·3	8·4	0·6	— 1·5	NE	NE	2·5	0·0	0·5	85	0·00
22	Apogee	29·946	62·0	43·7	49·8	42·8	79·6	41·0	..	..	7·0	13·1	4·0	— 4·3	NE	NE	2·0	0·0	0·0	65	0·00
23	..	29·885	70·3	40·5	52·2	46·5	82·7	37·0	..	..	5·7	14·8	1·6	— 2·1	NE	NE	2·5	0·0	0·2	80	0·00
24	Last Qr.	29·794	73·0	41·5	55·9	49·6	96·5	36·0	..	..	6·3	14·4	0·9	+ 1·5	NE	SE	1·5	0·0	0·0	45	0·00
25	..	29·748	72·0	43·0	58·3	49·0	86·0	39·0	..	..	9·3	20·2	1·3	+ 3·7	Calm	N	0·0	0·0	0·0	40	0·00
26	In Equator	29·799	72·0	47·5	59·6	49·4	96·8	41·0	..	..	10·2	20·7	2·0	+ 4·9	NNE	E	1·0	0·0	0·0	40	0·00
27	..	29·766	73·8	43·8	59·0	46·4	99·0	38·0	..	..	12·6	24·7	0·9	+ 4·1	NE	NE	1·5	0·0	0·3	65	0·00
28	..	29·602	70·0	47·5	58·0	56·1	79·6	41·5	..	..	1·9	10·3	0·0	+ 2·8	NNE	SE	0·0	0·0	0·0	10	0·13
29	..	29·548	70·0	55·4	60·2	56·8	82·0	50·5	56·7	54·2	3·4	8·5	0·4	+ 4·8	Calm	SE	0·0	0·0	0·0	25	0·24
30	..	29·517	77·0	54·7	64·3	56·0	101·0	50·0	60·7	58·2	8·3	17·9	1·0	+ 8·6	Calm	NE	0·0	0·0	0·0	25	0·05
31	..	29·600	74·0	53·5	61·4	56·2	96·0	50·2	61·7	59·2	5·2	12·2	0·0	+ 5·3	NE	E ; S	3·0	0·0	0·0	50	0·10
Means	..	29·789	64·9	43·9	53·1	46·1	81·2	40·2	54·7	53·3	6·9	14·5	1·8	+ 0·1	...	...	..	..	..	Sum 2335	Sum 2·35

BAROMETER READINGS.

The first maximum in the month was 29in·815 on the 2nd; the first minimum in the month was 29in·592 on the 4th.
The absolute maximum ,, was 30in·126 on the 11th; the second minimum ,, was 29in·551 on the 19th.
The third maximum ,, was 29in·954 on the 22nd; the absolute minimum ,, was 29in·491 on the 30th.
The range in the month was 0in·635.
The mean for the month was 29in·789, being 0in·028 *higher* than the average of the preceding 18 years.

TEMPERATURE OF THE AIR.

The highest in the month was 77°·0 on the 30th; the lowest was 33°·1 on the 6th; and the range in the month was 43°·9.
The mean ,, of all the highest daily readings was 64°·9, being 0°·6 *higher* than the average of the preceding 18 years.
The mean ,, of all the lowest daily readings was 43°·9, being 0°·2 *lower* than the average of the preceding 18 years.
The mean daily range was 21°·0, being 0°·8 *higher* than the average of the preceding 18 years.
The mean for the month was 53°·1, being 0°·3 *higher* than the average of the preceding 18 years.

MONTH and DAY, 1859.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
May 1	0	m	10, ci.-s	10, ci.-cu, ci.-s
2	0	0	6, cu, ci.-cu, ci	9, cu, ci.-cu, ci : 1[illegible]
3	0	w	3, ci	3, ci.-cu, ci
4	0	0 : w	10 : 3, ci.-cu, ci	3, ci.-cu, ci : [illegible]
5	0	m	3, ci.-cu, ci	3, ci.-cu : [illegible]
6	0	w	0	0
7	w	w : s	3, ci.-cu, ci.-s	7, cu, ci.-cu : 10, ci.-s, r
8	0	0	10, r : 5, ci.-cu, ci	0
9	0	w : s	0	7, ci : 10, s, ci.-s. lu.-co
10	0	w : s	10	10 : 0 : 10
11	0	0 : m	7, ci.-cu, ci.-s	7, ci.-cu, ci.-s : [illegible]
12	0	0 : s	10 : 0	0
13	0	s N, s P : w	0	0
14	0	w	8, cu, ci.-cu, ci	2, ci.-cu, ci : [illegible]
15	0	0	3, ci.-cu, ci : 10	10, oc.-r
16	0	0 : s	10, oc.-r : 9, ci.-cu, ci.-s	10 : 0 : 9, ci.-s, r
17	0	0	10, h.-r : th.-r	10 : 10, h.-r
18	0	0	10, h.-shs.-r	10
19	s **N**, s **P**, sps, g cur	s **N**, s **P**, sps, g cur	10 : h.-r	10, ci.-cu, ci.-s : t.-s
20	0	s **N**, s **P**, sps, g cur : 0	10, h.-r	10, h.-r : 0
21	0	0	10, ci.-s	8, li.-cl : 10, ci.-s, h.-r
22	0	m	10,	8, cu.-s, ci.-s : 0
23	0	0 : s	10 : 7, cu, ci-cu	7, cu, ci.-cu : 0
24	w	w : s	8, cu, ci.-cu, ci	8, cu, ci.-cu, ci
25	w	w : s	0	0
26	0	0 : s	0	0 : 3, ci.-cu, ci
27	v	v	7, ci.-s	5, ci, ci.-s : 10, r
28	0	w : 0	10.	10 : th.-r
29	0	0	10, h	10, ci.-s, r : 7 : 10, shs.-r
30	0	s **N**, s **P** : 0	7, ci.-cu, ci.-s	7, cu, ci.-cu, ci.-s : 0
31	0	m : 0	10 : 8, cu, ci.-cu, ci	5, ci.-s : 10, h.-r : 10

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 60°·4 on the 28th; and the lowest was 34°·3 on the 2nd.

The mean ,, was 46°·1, being 0°·7 *higher* than the average of the preceding 18 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot312$, being $0^{in}\cdot013$ *greater* than the average of the preceding 18 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $3^{gr}\cdot6$, being $0^{gr}\cdot2$ *greater* than the average of the preceding 18 years.

Degree of Humidity.—The mean for the month was 77 (that of Saturation being represented by 100), being 1 *greater* than the average of the preceding 18 years.

Weight of a Cubic Foot of Air.—The mean for the month was 538 grains, being the same as the average of the preceding 18 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·1.

WIND.

The proportions were of N. 15, S. 2, W. 0, and E. 14. The greatest pressure in the month was $7^{lbs}\cdot0$ on the square foot on the 2nd.

RAIN.

Fell on 9 days in the month, amounting to $2^{in}\cdot3$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{in}\cdot2$ *greater* than the average fall of the preceding 44 years.

MONTH and DAY, 1859.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 18 Years.	WIND AS DEDUCED FROM ANEMOMETERS.						Rain in Inches read at 9h P.M.
			Dry.			Dew Point	Highest in the Sun, as shewn by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning						OSLER'S.					WHEWELL'S	
															General Direction.		Pressure in lbs. on the square foot.			Amount of Horizontal Movement of the Air on each Day.	
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.		
		in	°	°	°	°	°	°	°	°	°	°	°				lbs.	lbs.	lbs.	miles	in
June 1	New	29·682	74·0	49·1	60·3	53·4	97·0	45·0	63·9	61·2	8·0	18·0	1·5	+ 3·9	S ; Calm	NE	1·0	0·0	0·0	70	0·00
2	Greatest Declination N	29·456	75·0	53·5	61·8	59·3	91·0	51·0	64·7	61·2	2·5	15·6	0·4	+ 5·2	NE	NE	2·5	0·0	0·3	55	0·29
3	Perigee	29·491	71·8	55·9	62·3	57·5	83·0	51·3	64·7	60·7	4·6	11·7	1·0	+ 5·5	NE	Calm	0·0	0·0	0·0	10	0·00
4	. .	29·644	79·0	57·5	65·6	58·3	104·0	51·8	65·2	61·7	7·8	16·5	2·9	+ 8·5	Calm	Calm	0·0	0·0	0·0	10	0·00
5	. .	29·794	77·2	59·9	63·5	58·8	93·2	58·7	64·7	63·2	4·7	11·0	0·2	+ 6·4	NE	Calm ; SW	4·0	0·0	0·0	15	0·30
6	. .	29·904	76·2	55·3	60·7	58·2	93·8	51·0	65·7	63·2	2·5	9·4	0·0	+ 5·5	SE	SE	0·0	0·0	0·0	25	0·00
7	First Qr.	29·840	75·5	55·5	62·2	56·7	95·0	52·7	66·7	64·2	5·5	13·9	2·9	+ 4·9	ESE	SE	0·0	0·0	0·0	25	0·00
8	In Equator	29·664	79·8	50·9	64·6	57·3	103·2	46·0	66·9	64·4	7·3	18·2	3·6	+ 7·2	NE	NE	2·0	0·0	0·0	80	0·00
9	. .	29·563	76·0	54·7	61·5	55·8	93·0	52·0	67·2	64·7	5·7	12·1	2·7	+ 4·0	N	N	3·5	0·0	0·3	130	0·00
10	. .	29·489	70·0	53·5	58·7	53·8	83·0	51·8	67·2	64·7	4·9	9·7	2·7	+ 1·0	N	N	2·5	0·0	1·0	80	0·01
11	. .	29·478	72·1	54·3	60·8	55·4	93·8	53·0	67·2	65·3	5·4	13·1	1·8	+ 2·8	N	SSE	0·0	0·0	0·0	15	0·00
12	. .	29·701	67·0	55·5	61·0	58·9	. .	52·0	67·2	65·2	2·1	7·0	0·2	+ 2·7	Calm	NW	0·0	0·0	0·0	20	0·23
13	. .	29·766	77·0	55·9	64·0	57·1	91·0	50·2	67·0	65·2	6·9	15·3	1·0	+ 5·5	NW	NW	0·0	0·0	0·0	55	0·00
14	. .	29·825	69·8	48·5	56·3	47·6	92·6	43·5	67·0	65·2	8·7	18·4	2·3	— 2·5	NW ; N	N ; Calm	0·0	0·0	0·0	50	0·00
15	Full Greatest Dec. S	29·778	74·0	48·5	60·8	50·2	98·0	41·0	66·0	64·2	10·6	22·1	2·3	+ 1·8	SE	W ; SW	0·0	0·0	0·0	45	0·00
16	. .	29·745	71·0	50·5	57·4	46·1	92·5	47·2	67·5	64·4	11·3	19·3	2·6	— 1·9	SW ; NW	NE	1·5	0·0	0·0	30	0·00
17	. .	29·897	70·5	47·0	57·5	48·9	82·2	41·0	66·5	64·2	8·4	17·8	1·7	— 2·1	NE ; S	NW ; SE	0·0	0·0	0·0	25	0·00
18	. .	29·973	75·5	48·2	60·9	50·1	94·0	41·8	66·5	64·2	10·8	22·0	1·7	+ 1·4	SSE	WSW	0·0	0·0	0·0	55	0·00
19	Apogee	29·878	69·0	56·0	60·6	55·4	75·8	54·0	66·2	64·2	5·2	16·2	1·6	+ 1·0	Calm	W	0·0	0·0	0·0	15	0·00
20	. .	29·702	67·0	51·7	57·3	54·0	74·0	55·0	66·2	64·7	3·3	8·5	2·2	— 2·5	W	W : NW	2·0	0·0	0·2	125	0·16
21	. .	29·798	69·0	47·2	56·4	45·3	80·0	40·0	65·2	63·7	11·1	20·3	5·9	— 3·5	NW	SW	2·0	0·0	0·3	120	0·00
22	In Equator	29·830	76·0	55·3	64·9	56·4	94·0	52·0	65·7	63·7	8·5	15·3	6·1	+ 4·9	SW	SW	2·5	0·0	0·7	170	0·00
23	Last Qr.	29·895	70·4	55·2	60·7	45·7	87·0	50·0	65·7	63·7	15·0	20·3	5·6	+ 0·5	SW	SW ; NW	3·0	0·0	1·0	80	0·00
24	. .	29·964	73·2	48·5	58·5	45·9	88·0	42·5	65·7	63·7	12·6	22·5	4·0	— 1·9	W	SW ; SSE	1·0	0·0	0·0	45	0·00
25	. .	29·815	78·8	43·5	61·9	52·0	93·0	41·0	64·7	63·7	9·9	22·4	4·0	+ 1·3	SE	SE	1·5	0·0	0·3	80	0·00
26	. .	29·776	81·3	62·1	69·0	58·9	82·0	52·0	65·7	64·2	10·1	17·3	8·8	+ 8·2	SE	S ; SE	4·5	0·0	0·5	85	0·03
27	. .	29·984	80·0	60·0	68·5	56·2	94·0	53·0	66·2	64·7	12·3	20·4	3·0	+ 7·5	SW	Calm	1·0	0·0	0·0	40	0·00
28	. .	29·750	73·0	57·5	63·1	61·2	79·0	55·2	65·7	64·2	1·9	5·8	0·0	+ 1·8	NE	E ; SW	0·0	0·0	0·0	75	0·41
29	Greatest Declination N	29·927	72·7	52·8	60·5	50·5	90·5	50·5	65·7	64·2	10·0	19·3	3·4	— 1·0	W	NW ; N	2·5	0·0	0·2	25	0·00
30	New	29·964	76·0	48·5	61·4	50·0	92·5	42·0	66·7	64·2	11·4	20·5	2·3	— 0·1	N	N	2·0	0·0	0·0	40	0·00
Means	. .	29·766	73·9	53·0	61·4	53·8	90·0	48·9	66·0	63·9	7·6	16·0	2·6	+ 2·5	. . .	. . .	. .	. .	. .	Sum 1695	Sum 1·43

BAROMETER READINGS.

The first maximum in the month was $29^{\rm in}\cdot714$ on the 1st; the absolute minimum in the month was $29^{\rm in}\cdot432$ on the 2nd.

The second maximum ,, was $29^{\rm in}\cdot921$ on the 6th; the second minimum ,, was $29^{\rm in}\cdot450$ on the 10th.

The third maximum ,, was $29^{\rm in}\cdot858$ on the 14th; the third minimum ,, was $29^{\rm in}\cdot706$ on the 15th.

The absolute maximum ,, was $30^{\rm in}\cdot008$ on the 17th; the fourth minimum ,, was $29^{\rm in}\cdot678$ on the 20th.

The fifth maximum ,, was $29^{\rm in}\cdot974$ on the 24th; the fifth minimum ,, was $29^{\rm in}\cdot732$ on the 26th.

The sixth maximum ,, was $29^{\rm in}\cdot995$ on the 27th; the sixth minimum ,, was $29^{\rm in}\cdot735$ on the 28th.

The range in the month was $0^{\rm in}\cdot576$.

The mean for the month was $29^{\rm in}\cdot766$, being $0^{\rm in}\cdot039$ *lower* than the average of the preceding 18 years.

TEMPERATURE OF THE AIR.

The highest in the month was 81°·3 on the 26th; the lowest was 43°·5 on the 25th.

The range ,, was 37°·8.

The mean ,, of all the highest daily readings was 73°·9, being 2°·5 *higher* than the average of the preceding 18 years.

The mean ,, of all the lowest daily readings was 53°·0, being 2°·9 *higher* than the average of the preceding 18 years.

The mean daily range was 20°·9, being 0°·4 *lower* than the average of the preceding 18 years.

The mean for the month was 61°·4, being 2°·3 *higher* than the average of the preceding 18 years.

MONTH and DAY, 1859.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
June 1	0	0 : m	5, ci.-s	5, cu, ci.-cu, ci : 2, ci : 8, ci.-s, r
2	0 : s	s : m	10, h-r : 8, ci.-s : 10, th-r	10, ci.-s : r
3	0	m : 0	10 : 9, ci.-s, ci	10 : oc.-r
4	0	s **N**, sps	7, ci.-s	7, cu, ci.-cu, ci : 10, oc-r
5	0	ss **P**, ss **N**	10, f	10 : t.-s : 0
6	0	ss, sps	10	10, cu, ci.-cu : 7 : th.-f
7	0	0 : ss	10, ci.-s	10, ci.-s : 3, cu, ci.-cu, l
8	v	v	3, ci	3, ci.-cu, ci
9	0	0 : w	10	7, cu, ci.-cu, ci
10	0	0	10 : 9, ci.-s, ci	10 : th-r : 10
11	0	0 : w	10	8, cu, ci.-cu, ci : 10 : 5, ci.-cu, ci.-s
12	ss **N**, sps, g cur	ss, sps, g cur	10 : h.-r, t	10, ci.-s, h-r, l, t : 7, ci.-s
13	0	0	10, ci.-s, h	9, ci.-cu, ci : 8, cu, ci.-cu, ci
14	0	0 : w	10 : 7, cu, ci.-cu	3, ci.-cu, ci
15	0	0 : w	7, cu, ci.-cu, ci.	5, cu, ci.-cu, ci : 7, ci.-s
16	0	0 : w	9, ci.-cu, ci.-s	9, cu, ci.-cu, ci
17	0	0 : w	7, ci.-cu, ci, h	7, ci.-cu, ci, h
18	0	0	10, h	10, h : ci.-s
19	0	0	10, h	10, gt.-glm : ci.-s
20	0	0	10	10, th.-r
21	0	0	7, cu, ci.-cu, ci	10 : th.-r
22	0	0	10, cu, ci.-cu, ci	10, cu, ci.-cu, ci.-s : th.-r
23	0	0	8, ci.-cu, ci.-s	8, ci.-cu, ci.-s
24	0	0 : w	7, ci.-s	8, cu, ci.-cu, ci : 0
25	0	0 : w	0	0
26	w	w : 0	10, t, r	5, cu.-s
27	w : 0	0 : w	2, ci.-s	9, ci.-s : ci : 10, r
28	0 : w	0	10	10, th.-r
29	0	w : 0	10, ci.-s	10, s, ci.-s
30	0	w : 0	3, ci	3, ci.-cu, ci

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was $64^{\circ}\cdot4$ on the 28th; and the lowest was $44^{\circ}\cdot4$ on the 21st and 24th.
The mean ,, was $53^{\circ}\cdot8$, being $3^{\circ}\cdot0$ *higher* than the average of the preceding 18 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot415$, being $0^{\text{in}}\cdot043$ *greater* than the average of the preceding 18 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $4^{\text{gr}}\cdot6$, being $0^{\text{gr}}\cdot5$ *greater* than the average of the preceding 18 years.

Degree of Humidity.—The mean for the month was 77 (that of Saturation being represented by 100), being 4 *greater* than the average of the preceding 18 years.

Weight of a Cubic Foot of Air.—The mean for the month was 528 grains, being 3 grains *less* than the average of the preceding 18 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was $7\cdot4$.

WIND.

The proportions were of N. 12, S. 6, W. 6, and E. 6. The greatest pressure in the month was $4^{\text{lbs}}\cdot5$ on the square foot on the 26th.

RAIN.

Fell on 7 days in the month, amounting to $1^{\text{in}}\cdot4$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{\text{in}}\cdot5$ *less* than the average fall of the preceding 44 years.

MONTH and DAY, 1859.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Readings of Thermometers. Dry. Lowest.	Readings of Thermometers. Dry. Mean Daily Value.	Readings of Thermometers. Dew Point. Mean Daily Value.	Readings of Thermometers. Highest in the Sun, as shown by a Self-Registering Thermometer read at 9h P.M.	Readings of Thermometers. Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9h A.M. next morning.	Readings of Thermometers. In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest.	Readings of Thermometers. In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference between the Dew Point Temperature and Air Temperature. Greatest.	Difference between the Dew Point Temperature and Air Temperature. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 18 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Wind as deduced from Anemometers. Osler's. General Direction. P.M.	Wind as deduced from Anemometers. Osler's. Pressure in lbs. on the square foot. Greatest.	Wind as deduced from Anemometers. Osler's. Pressure in lbs. on the square foot. Least.	Wind as deduced from Anemometers. Osler's. Pressure in lbs. on the square foot. Mean of 24 Obs.	Wind as deduced from Anemometers. Whewell's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches read at 9h P.M.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
July 1	Perigee	29·962	73·0	49·0	59·6	54·5	93·0	43·0	67·7	66·2	5·1	15·7	2·5	− 1·9	N	NE	0·0	0·0	0·0	20	0·00
2	..	29·987	76·2	54·5	62·2	59·2	98·5	50·7	67·2	65·7	3·0	13·8	1·0	+ 0·8	NE	ENE	2·0	0·0	0·3	60	0·80
3	..	29·939	80·0	57·5	66·0	63·0	78·0	55·0	67·2	65·2	3·0	9·0	0·8	+ 4·6	NE	NE	2·0	0·0	0·0	25	0·20
4	..	30·046	80·0	57·5	64·9	60·4	96·4	57·0	67·2	65·2	4·5	16·0	0·2	+ 3·4	Calm	SW	0·0	0·0	0·0	45	0·00
5	In Equator	30·190	79·6	52·9	65·1	56·4	103·0	54·0	68·7	66·2	8·7	20·1	1·4	+ 3·5	SW	SW	0·0	0·0	0·0	15	0·00
6	..	30·153	84·5	55·0	69·3	58·3	108·0	55·2	69·2	67·2	11·0	23·5	1·0	+ 7·6	SW	SW	0·0	0·0	0·0	25	0·00
7	First Qr.	30·044	83·8	56·5	70·0	58·2	105·5	57·3	70·9	68·2	11·8	21·9	2·5	+ 8·2	SW	WNW	0·0	0·0	0·0	40	0·00
8	..	30·047	81·0	57·7	68·5	57·4	102·8	53·4	70·9	68·2	11·1	19·0	2·5	+ 6·8	WNW	N : E	0·0	0·0	0·0	25	0·00
9	..	30·075	81·2	54·9	68·1	59·6	101·2	48·2	70·9	68·2	8·5	19·9	1·0	+ 6·6	E ; NNE	Calm	0·0	0·0	0·0	5	0·00
10	..	30·068	83·5	55·0	68·6	62·1	107·0	48·7	70·9	69·2	6·5	16·2	0·0	+ 7·1	E	SE	0·0	0·0	0·0	15	0·00
11	..	30·099	87·4	57·9	72·3	61·4	107·5	50·3	71·4	69·2	10·9	23·0	1·5	+10·7	SE	S	0·0	0·0	0·0	50	0·00
12	Greatest Declination S.	29·991	92·5	58·5	75·7	60·7	116·0	59·0	71·9	69·7	15·0	29·6	3·2	+14·0	SSE ; SW	SW	1·0	0·0	0·0	50	0·00
13	..	30·005	92·0	59·2	75·2	60·7	115·0	..	72·4	69·7	14·5	27·7	0·9	+13·4	W	WSW ; N	2·0	0·0	0·4	80	0·00
14	..	30·115	80·8	53·5	66·0	54·5	106·4	..	73·4	71·2	11·5	22·1	4·2	+ 4·3	N	NE ; SE	0·0	0·0	0·0	15	0·00
15	Full	30·052	83·8	52·1	68·4	53·7	102·4	45·6	73·7	71·2	14·7	28·9	3·4	+ 6·7	SE	SW ; N	0·0	0·0	0·0	35	0·00
16	Apogee	30·074	85·2	57·0	70·7	57·8	103·2	50·0	73·9	71·2	12·9	26·2	1·2	+ 9·0	NNW	NW ; S	0·0	0·0	0·0	50	0·00
17	..	29·846	88·8	60·9	73·2	57·1	110·0	55·0	74·9	72·7	16·1	27·5	3·2	+11·5	SW	SW	1·0	0·0	0·0	60	0·00
18	..	29·638	93·0	56·7	74·3	59·8	115·2	..	74·9	72·7	14·5	27·2	2·5	+12·6	SSW	S ; SE	5·0	0·0	0·2	55	0·73
19	..	29·751	84·0	62·0	70·9	61·0	90·0	60·0	75·2	72·7	9·9	19·9	1·7	+ 9·2	Calm	SW	2·0	0·0	0·0	55	0·00
20	In Equator	29·846	83·0	58·5	67·7	62·2	98·0	53·5	75·4	72·7	5·5	17·2	1·9	+ 6·1	SW ; NE	Calm	1·0	0·0	0·0	30	0·35
21	..	29·743	79·0	58·5	66·5	60·9	90·8	54·0	75·4	73·2	5·6	17·3	1·6	+ 5·0	NE	SW	2·0	0·0	0·3	65	1·10
22	..	29·715	81·0	58·3	68·9	56·7	94·0	52·5	74·7	72·7	12·2	25·5	1·1	+ 7·4	SW	SW	0·0	0·0	0·0	30	0·00
23	Last Qr.	29·752	69·3	59·5	61·5	57·8	70·0	55·0	74·4	72·7	3·7	10·5	1·7	0·0	SW ; NE	NNE	0·0	0·0	0·0	65	0·05
24	..	29·974	72·0	53·5	59·8	50·0	95·0	50·2	72·9	71·7	9·8	17·8	2·2	− 1·7	N	NE	1·5	0·0	0·0	35	0·00
25	..	29·982	77·0	46·5	62·1	50·0	99·0	40·5	72·4	70·7	12·1	24·7	1·8	+ 0·3	N	W	0·0	0·0	0·0	40	0·00
26	..	29·955	82·8	58·0	69·2	58·0	104·0	53·5	71·4	70·7	11·2	21·3	1·1	+ 7·1	W	W ; SW	0·0	0·0	0·0	135	0·00
27	Greatest Declination N	29·909	85·0	61·5	71·5	61·0	102·2	57·0	72·4	71·7	10·5	19·0	1·7	+ 9·2	SW	SW	3·0	0·0	1·0	160	0·00
28	..	29·942	83·0	63·5	71·4	60·0	104·0	60·7	72·4	71·2	11·4	21·8	1·5	+ 8·9	SW	SW	3·5	0·0	1·0	145	0·00
29	New ; Perigee	29·871	77·9	63·5	69·3	60·1	98·0	56·8	72·4	70·7	9·2	20·6	2·1	+ 6·8	SW	Calm	2·0	0·0	0·0	55	0·00
30	..	29·730	75·2	60·7	65·4	59·4	91·0	58·5	72·4	70·7	6·0	11·2	3·4	+ 2·9	Calm	Calm	0·0	0·0	0·0	100	0·03
31	..	29·541	79·5	61·8	67·5	56·4	96·0	58·2	71·9	70·1	11·1	23·6	2·7	+ 5·0	SW	SW	8·0	0·0	2·0	185	0·00
Means	..	29·937	81·8	57·1	68·1	58·3	100·0	53·3	72·0	70·0	9·7	20·6	1·9	+ 6·3	...	...	..	..	..	Sum 1770	Sum 3·26

BAROMETER READINGS.

The absolute maximum in the month was $30^{\text{in}}\cdot198$ on the 5th; the first minimum in the month was $29^{\text{in}}\cdot972$ on the 12th.
The second maximum ,, was $30^{\text{in}}\cdot143$ on the 14th; the second minimum ,, was $29^{\text{in}}\cdot602$ on the 18th.
The third maximum ,, was $29^{\text{in}}\cdot874$ on the 20th; the third minimum ,, was $29^{\text{in}}\cdot685$ on the 22nd.
The fourth maximum ,, was $30^{\text{in}}\cdot007$ on the 25th; the absolute minimum ,, was $29^{\text{in}}\cdot511$ on the 31st.
The range in the month was $0^{\text{in}}\cdot687$.
The mean for the month was $29^{\text{in}}\cdot937$, being $0^{\text{in}}\cdot142$ *higher* than the average of the preceding 18 years.

TEMPERATURE OF THE AIR.

The highest in the month was 93°·0 on the 18th; the lowest was 46°·5 on the 25th; and the range in the month was 46°·5.
The mean ,, of all the highest daily readings was 81°·8, being 8°·2 *higher* than the average of the preceding 18 years.
The mean ,, of all the lowest daily readings was 57°·1, being 4°·0 *higher* than the average of the preceding 18 years.
The mean daily range was 24°·7, being 4°·2 *higher* than the average of the preceding 18 years.
The mean for the month was 68°·1, being 6°·5 *higher* than the average of the preceding 18 years.

MONTH and DAY, 1859.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
July 1	v	v	10, ci.-s	10, cu.-s, ci.-s : 5
2	0	m : s, sps	10, ci.-s	2, ci : 10 : l, t, h.-r
3	0	0 : w	10	10 : l, t, h.-r
4	0	0	10, f	7, cu, ci.-cu : 0
5	m	0	2, ci, h	2, ci.-cu, ci
6	w	w	3, cu, ci.-cu, ci	5, ci.-cu, ci : c. h
7	0	0 : w	0	7, ci.-cu, ci.-s
8	w : N, w	w	7, cu, ci.-cu	7, ci.-cu, ci.-s : 0, m
9	0	0 : w	3, ci	3, ci.-cu, ci
10	0	0	2, ci.-cu	8, cu, ci.-cu, ci : 0
11	0	w : 0	3, ci	5, ci : 0
12	w	w	0	0
13	0	w : 0	0	0
14	w	0	0 : 5, cu	10, cu.-s, ci.-s : 5, ci
15	0	0 : w	0 : 8, cu, ci.-cu	10, ci.-s : 0
16	0	w : 0	0	3, ci.-cu : 0
17	0	0	0	0
18	0	v	0	7, cu, ci.-cu : 10, t.-s
19	0	0 : w	7, cu, ci.-cu	7, ci.-cu, ci : 0
20	ss N, ss P, sps, g cur : w	w	10, t.-s : 10, h.-r : 5, cu, ci.-cu	3, ci.-cu, ci : t : 0
21	0	0	10, ci.-s, r	8, cu, cu.-s : 0 : 10, l, t
22	m	m	3, ci	3, ci.-cu, ci : 5, cu.-s
23	0	0	10, th.-r	10, oc.-r : 10
24	v	v	3, cu, ci.-cu : 9, ci.-s	9, ci.-s : 0
25	0	0 : w	8, ci.-s, h	2, ci : 9, s
26	w	0	2, cu, ci	5, cu, ci.-cu, cu.-s
27	0	0 : w	7, ci.-cu, ci.-s	3, cu, ci.-cu : 10, ci.-s
28	w	w : s	10, ci.-s	10, ci.-s : 5, cu, ci.-cu
29	w	0	10, oc.-r	10, ci.-s : r
30	0	0 : w	10, ci.-cu, ci.-s	7, cu.-s, ci.-s
31	0	w	10, oc.-r : 9, ci.-s : 5, cu.-s	5, cu.-s.-ci.-s : 0

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 66°·7 on the 21st; and the lowest was 48°·0 on the 25th.
The mean ,, was 58°·3, being 4°·6 *higher* than the average of the preceding 18 years.

***Elastic Force of Vapour.*—The mean for the month was $0^{\text{in}}\cdot487$, being $0^{\text{in}}\cdot073$ *greater* than the average of the preceding 18 years.**

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $5^{\text{gr}}\cdot4$, being $0^{\text{gr}}\cdot8$ *greater* than the average of the preceding 18 years.

***Degree of Humidity.*—The mean for the month was 70 (that of Saturation being represented by 100), being 6 *less* than the average of the preceding 18 years.**

Weight of a Cubic Foot of Air.—The mean for the month was 524 grains, being 3 grains *less* than the average of the preceding 18 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 5·1.

WIND.

The proportions were of N. 5, S. 10, W. 11, and E. 5. The greatest pressure in the month was $8^{\text{lbs}}\cdot0$ on the square foot on the 31st.

RAIN.

Fell on 7 days in the month, amounting to $3^{\text{in}}\cdot3$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{\text{in}}\cdot6$ *greater* than the average fall of the preceding 44 years.

MONTH and DAY, 1859.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 18 Years.	WIND AS DEDUCED FROM ANEMOMETERS.						Rain in Inches read at 9h P.M.
			Dry.			Dew Point.	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning.						OSLER'S.					WHEWELL'S.	
															General Direction.		Pressure in lbs. on the square foot.				
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.	Amount of Horizontal Movement of the Air on each Day.	
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
Aug. 1	..	29·765	78·0	56·5	65·7	52·0	99·0	52·0	71·4	70·2	13·7	26·7	4·0	+ 3·2	SW	SW	3·0	0·0	0·8	160	0·00
2	In Equator	29·932	75·5	52·5	62·2	51·8	84·7	45·0	71·4	70·2	10·4	23·6	1·6	− 0·1	SW	SW	2·0	0·0	0·0	115	0·00
3	..	29·814	80·0	51·5	65·4	51·0	100·3	49·0	70·9	69·7	14·4	25·5	1·8	+ 3·2	SSW	SW ;	3·0	0·0	0·5	145	0·00
4	..	29·764	76·5	58·1	65·1	51·3	96·0	55·0	70·4	69·2	13·8	25·2	7·6	+ 3·0	S ; SW	SW	4·0	0·0	0·8	150	0·10
5	First Qr.	29·903	75·8	51·0	60·7	50·1	95·7	42·0	70·4	69·2	10·6	19·8	3·2	− 1·3	SW	SW	3·0	0·0	0·8	135	0·03
6	..	29·901	70·0	48·9	59·7	51·7	85·0	40·0	69·2	68·2	8·0	16·9	3·0	− 2·3	SW	S ; SE	1·0	0·0	0·0	125	0·01
7	..	29·689	78·2	59·5	68·1	59·7	87·0	57·0	68·7	66·2	8·4	17·2	3·4	+ 6·1	SSW	S	3·0	0·0	0·5	135	0·00
8	Greatest Declination S.	29·672	81·0	63·3	68·2	61·4	95·0	60·0	68·7	66·2	6·8	12·2	1·0	+ 6·2	S ; SW	SW; N	1·5	0·0	0·0	95	0·03
9	..	29·834	63·5	55·7	57·9	53·8	65·0	57·6	68·7	66·2	4·1	7·4	2·0	− 4·0	NE	NE	3·0	0·0	1·0	100	0·10
10	..	29·863	66·0	54·5	57·5	52·6	72·5	52·0	68·7	66·2	4·9	6·8	2·2	− 4·3	NE	NE ; N	2·5	0·0	0·5	55	0·19
11	..	29·881	73·0	55·3	62·3	55·2	80·5	53·3	67·2	65·7	7·1	14·4	2·5	+ 0·6	N	Calm	0·0	0·0	0·0	35	0·00
12	Apogee	29·849	81·0	51·5	66·1	55·4	101·0	46·0	67·2	65·7	10·7	23·3	1·4	+ 4·5	SE	SW	0·0	0·0	0·0	40	0·00
13	Full	29·783	80·8	54·7	67·1	56·5	99·0	52·0	67·9	66·0	10·6	21·3	1·2	+ 5·6	SW	SW	2·0	0·0	0·3	80	0·00
14	..	29·708	76·0	60·1	63·9	53·4	90·0	57·0	67·7	66·7	10·5	18·4	3·8	+ 2·4	SW	W ; SW	3·5	0·0	0·3	95	0·00
15	..	29·666	70·0	56·0	59·4	53·5	86·0	52·0	68·2	67·2	5·9	8·9	2·3	− 2·0	S	NW	7·0	0·0	0·5	85	0·19
16	In Equator	30·005	74·7	47·5	59·5	51·0	93·0	43·0	68·7	67·7	8·5	18·4	2·3	− 1·9	NW	W	0·0	0·0	0·0	45	0·00
17	..	29·984	68·5	53·5	60·7	58·6	72·0	51·0	68·2	67·2	2·1	6·1	0·0	− 0·6	SW	W	0·0	0·0	0·0	15	0·00
18	..	29·939	78·0	61·7	66·6	61·1	93·2	59·0	67·7	66·7	5·5	10·3	0·0	+ 5·5	Calm	Calm	0·0	0·0	0·0	0	0·00
19	..	29·992	84·0	56·5	68·1	58·4	104·0	52·0	67·7	66·7	9·7	19·6	1·7	+ 7·2	Calm	SE	0·0	0·0	0·0	15	0·00
20	..	30·020	85·0	53·7	69·4	57·0	106·0	48·5	68·2	67·2	12·4	26·9	1·6	+ 8·6	Calm	NE	0·0	0·0	0·0	45	0·00
21	Last Qr.	30·117	75·0	55·5	62·6	52·8	85·0	53·0	68·7	67·7	9·8	17·2	2·2	+ 2·0	N	N ; NE	1·5	0·0	0·0	50	0·00
22	..	30·139	80·0	47·5	63·4	54·0	93·0	43·0	68·2	67·2	9·4	23·3	1·9	+ 3·0	NE ; NW	NW	0·0	0·0	0·0	55	0·00
23	Greatest Declination N.	30·001	83·0	52·7	66·3	54·5	99·0	44·0	68·2	67·2	11·8	23·3	1·6	+ 6·0	NW	NW	0·0	0·0	0·0	20	0·00
24	..	29·826	85·0	52·5	69·1	56·5	102·0	46·0	68·2	67·2	12·6	27·5	1·8	+ 8·8	NW	E	0·0	0·0	0·0	40	0·00
25	..	29·632	91·3	54·9	73·4	56·9	108·0	48·0	68·2	67·2	16·5	29·6	1·6	+ 13·2	E ; SW	SW	2·0	0·0	0·0	90	0·28
26	..	29·615	74·0	62·3	65·9	61·3	80·0	60·0	68·2	67·2	4·6	9·5	1·7	+ 6·0	SW	SW	1·0	0·0	0·0	50	0·00
27	Perigee	29·695	78·8	57·2	65·4	57·6	93·0	49·3	68·7	67·7	7·8	18·7	1·6	+ 5·7	SW	SW	0·0	0·0	0·0	75	0·00
28	New	29·831	70·0	53·5	58·7	50·3	82·0	46·7	68·2	67·2	8·4	13·9	4·4	− 0·9	SW ; NW	Calm	0·0	0·0	0·0	85	0·00
29	In Equator	29·618	76·9	51·8	62·0	51·1	94·0	49·0	68·2	67·2	10·9	22·0	0·8	+ 2·6	S ; SW	SW	5·0	0·0	1·5	200	0·13
30	..	29·435	66·0	48·5	55·5	46·0	80·0	42·0	67·4	66·2	9·5	15·3	2·3	− 3·6	SW	SW	5·0	0·0	2·3	185	0·03
31	..	29·474	64·9	46·5	53·3	42·5	78·6	40·3	66·7	65·6	10·8	17·9	4·4	− 5·7	WSW	W	4·5	0·0	2·0	145	0·00
Means	..	29·818	76·1	54·3	63·5	54·2	90·3	49·8	68·6	67·3	9·4	18·3	2·3	+ 2·5	...	...	..	..	..	Sum 2665	Sum 1·13

BAROMETER READINGS.

The first maximum in the month was 29$^{\text{in}}$·948 on the 2nd; the first minimum in the month was 29$^{\text{in}}$·720 on the 4th.
The second maximum ,, was 29$^{\text{in}}$·959 on the 6th; the second minimum ,, was 29$^{\text{in}}$·640 on the 8th.
The third maximum ,, was 29$^{\text{in}}$·899 on the 11th; the third minimum ,, was 29$^{\text{in}}$·518 on the 15th.
The absolute maximum ,, was 30$^{\text{in}}$·184 on the 22nd; the fourth minimum ,, was 29$^{\text{in}}$·604 on the 26th.
The fifth maximum ,, was 29$^{\text{in}}$·850 on the 28th; the absolute minimum ,, was 29$^{\text{in}}$·427 on the 30th.
The range in the month was 0$^{\text{in}}$·757.
The mean for the month was 29$^{\text{in}}$·818, being 0$^{\text{in}}$·019 *higher* than the average of the preceding 18 years.

TEMPERATURE OF THE AIR.

The highest in the month was 91°·3 on the 25th; the lowest was 46°·5 on the 31st.
The range ,, was 44°·8.
The mean ,, of all the highest daily readings was 76°·1, being 3°·2 *higher* than the average of the preceding 18 years.
The mean ,, of all the lowest daily readings was 54°·3, being 0°·9 *higher* than the average of the preceding 18 years.
The mean daily range was 21°·8, being 2°·3 *higher* than the average of the preceding 18 years.
The mean for the month was 63°·5, being 2°·1 *higher* than the average of the preceding 18 years.

MONTH and DAY, 1859.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Aug. 1	o	w : o	5, cu, ci.-cu, ci	5, ci.-cu : 5, ci.-s
2	w	o : w	7, ci.-cu, ci.-s : 10, ci.-s	10, ci.-s : o
3	w	w	o : 5, ci.-cu, ci	5, ci.-cu, ci
4	o	o : m	10, ci.-s, h.-r : 3, ci	o
5	m	ss N, ss P, sps, g cur : m	3, ci.-cu, ci	10, h.-r : o
6	m	o : m	9, ci.-cu, ci.-s	10, ci.-s, r
7	w	w	10, ci.-s	10, ci.-s
8	o	w : o	10, h.-shs.-r	10, ci.-s : oc.-r
9	o	o : m	10, oc.-r	10, oc.-r
10	o	o	10, oc.-r	10, oc.-r
11	o	s : w	10, ci.-s	7, cu, ci.-cu
12	o	w : o	3, cu, ci.-cu, ci	3, cu, ci.-cu : o
13	m	o : m	2, ci	7, cu, ci.-cu : 2, ci
14	m	m	10, r, h	5, ci, li.-cl
15	o	o	10, r	10 : o, h
16	w	o : w	7, ci, h	8, cu, ci.-cu, ci : 5, ci.-s : f
17	o	o	10, r	10, r : o : f
18	o	o	10, f	10, cu.-s, ci.-s
19	o	o	8, ci.-s	8, ci.-cu, ci.-s : o
20	s	s	o	o
21	o : m	m : o	10, ci.-cu, ci.-s	10, ci.-cu, ci.-s : o
22	s	o : s	8, ci, h	5 : h
23	w	N, w : w	7, ci, h	7, ci.-s, h : o
24	o	w	o	o
25	o	w : ss N, sps, g cur	10, ci.-s	7, ci.-s, ci : l, t, h.-r
26	o	o : w	10	10, r : o
27	m	m : ss N, ss P, sps, g cur	10	5, cu, ci.-cu, h : 10, l, t : o
28	s	w	7, cu, ci.-cu	7, cu, ci.-cu : o
29	w	o : N, w	7, ci.-cu, ci.-s	7, cu, ci.-cu : 10, h.-r : 10
30	w	ss N, ss P, sps, g cur : o	7, ci.-cu, ci.-s	10, cu.-s, ci.-s, t : 10, t, hl, r : 10
31	o	o : s	10, ci.-s	10 : 5, ci.-cu, ci.-s : o

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was $65^{\circ}\cdot 0$ on the 26th; and the lowest was $42^{\circ}\cdot 8$ on the 31st.

The mean ,, was $54^{\circ}\cdot 2$, being $0^{\circ}\cdot 1$ *higher* than the average of the preceding 18 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot 421$, being $0^{\text{in}}\cdot 002$ *less* than the average of the preceding 18 years.

***Weight of Vapour in a Cubic Foot of Air.*—The mean for the month was $4^{\text{gr}}\cdot 7$, being the same as the average of the preceding 18 years.**

Degree of Humidity.—The mean for the month was 72 (that of Saturation being represented by 100), being 5 *less* than the average of the preceding 18 years.

Weight of a Cubic Foot of Air.—The mean for the month was 527 grains, being 1 grain *less* than the average of the preceding 18 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was $6\cdot 5$.

WIND.

The proportions were of N. 6, S. 11, W. 11, and E. 3. The greatest pressure in the month was $7^{\text{lbs}}\cdot 0$ on the square foot on the 15th.

RAIN.

Fell on 11 days in the month, amounting to $1^{\text{in}}\cdot 1$, as measured in the simple cylinder gauge partly sunk below the ground; being $1^{\text{in}}\cdot 3$ *less* than the average fall of the preceding 44 years.

MONTH and DAY, 1859.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								DIFFERENCE between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 18 Years.	WIND AS DEDUCED FROM ANEMOMETERS.						Rain in Inches read at 9^h P.M.
			Dry.			Dew Point.	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9^h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9^h. A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9^h A.M. next morning.						OSLER'S. General Direction.		Pressure in lbs. on the square foot.			WHEWELL'S. Amount of Horizontal Movement of the Air on each Day.	
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.		
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Sept. 1	..	29·481	68·8	47·0	55·4	42·9	88·0	41·2	66·7	65·6	12·5	20·5	3·8	− 3·4	WSW	NW	3·0	0·0	1·0	80	0·00
2	..	29·617	67·2	48·5	57·9	53·5	74·8	59·3	66·5	65·5	4·4	12·6	2·7	− 0·7	WSW	SW	3·5	0·0	0·8	100	0·19
3	..	29·744	68·8	55·3	59·4	50·2	80·0	53·0	65·2	64·2	9·2	14·1	4·0	+ 0·9	WNW	Calm	2·5	0·0	0·0	15	0·00
4	First Qr.	29·911	67·0	46·5	56·0	49·3	68·0	39·5	65·7	64·7	6·7	13·3	2·1	− 2·4	W	Calm	0·0	0·0	0·0	10	0·00
5	Greatest Declination S	29·993	70·2	46·5	57·3	46·2	91·0	38·0	66·2	64·2	11·1	20·5	2·7	− 0·9	NE	Calm	0·0	0·0	0·0	20	0·00
6	..	29·648	69·5	52·5	59·1	52·1	68·0	50·0	64·7	63·7	7·0	13·9	4·2	+ 1·1	SSW	SW	8·0	0·0	1·7	165	0·28
7	..	29·761	68·5	49·5	57·6	49·1	81·3	43·3	64·2	63·0	8·5	15·5	2·3	− 0·2	W	SW	3·5	0·0	2·0	115	0·00
8	Apogee	29·847	72·0	53·8	61·5	54·3	81·0	48·5	64·2	63·0	7·2	13·9	1·1	+ 3·8	SW	SW	2·5	0·0	1·0	170	0·01
9	..	29·716	68·0	53·7	59·6	54·0	80·0	55·0	64·2	63·0	5·6	13·5	1·3	+ 2·0	SW	SW	7·0	0·0	2·0	175	0·10
10	..	30·009	67·5	47·2	55·1	42·1	85·0	39·6	63·7	62·5	13·0	19·0	4·4	− 2·4	W	WNW	4·5	0·0	2·5	105	0·00
11	..	30·167	68·0	43·5	54·6	46·4	85·0	42·0	63·7	62·6	8·2	15·8	3·7	− 2·8	SW	W	2·0	0·0	0·2	30	0·00
12	Full; In Equator.	29·989	73·2	41·5	57·6	48·8	95·2	36·0	63·7	62·6	8·8	22·3	0·9	+ 0·3	W	Calm	0·0	0·0	0·0	40	0·00
13	..	29·613	64·0	45·0	51·8	44·7	78·4	48·0	63·8	62·2	7·1	15·4	1·1	− 5·4	SE; SW	SW; SE	6·0	0·0	1·4	100	0·18
14	..	29·404	58·6	44·2	50·8	47·9	61·0	40·0	63·3	62·2	2·9	8·7	0·0	− 6·2	SE: N	N	6·0	0·0	1·0	120	0·35
15	..	29·433	64·5	46·3	53·0	49·0	72·7	40·5	62·7	61·7	4·0	11·4	0·4	− 3·7	NNW	Calm	1·5	0·0	0·0	20	0·26
16	..	29·334	67·0	45·8	54·4	50·3	81·6	39·8	61·7	60·8	4·1	13·3	0·8	− 2·1	Calm: N	N	3·0	0·0	0·8	140	0·11
17	..	29·669	65·0	49·3	54·4	46·3	76·2	50·0	61·7	60·8	8·1	13·9	5·5	− 1·9	NNE	N	8·0	0·0	2·6	105	0·00
18	..	29·888	64·0	43·2	52·6	45·9	68·0	35·0	60·7	59·2	6·7	14·6	1·8	− 3·4	N	Calm; SW	0·0	0·0	0·0	75	0·00
19	Greatest Dec. N. Last Quarter.	29·751	66·5	49·2	55·8	47·1	84·5	49·5	60·2	58·5	8·7	16·5	2·5	− 0·1	SW; N	N	2·5	0·0	0·3	25	0·24
20	..	29·740	68·0	41·5	53·8	47·0	83·2	38·3	59·7	58·4	6·8	15·6	2·0	− 1·8	NW	SSW	2·0	0·0	0·0	100	0·00
21	..	29·288	63·0	46·7	52·6	49·2	73·0	48·0	59·7	58·4	3·4	7·4	0·6	− 2·9	S	SW	3·5	0·0	0·5	200	0·29
22	..	29·556	64·0	45·7	54·7	46·3	75·5	43·0	59·7	58·4	8·4	14·1	2·7	− 0·7	SW	SW	6·0	0·0	2·2	105	0·00
23	..	29·620	68·0	47·8	58·8	58·4	70·5	46·0	59·7	58·4	0·4	6·7	0·0	+ 3·5	Calm	SW	3·0	0·0	0·8	160	0·11
24	Perigee	29·720	76·0	62·0	67·4	57·9	87·2	60·7	59·7	58·4	9·5	16·2	1·1	+ 12·4	SSW	S	3·0	0·0	1·3	110	0·00
25	In Equator	29·732	70·0	57·4	62·0	58·0	76·6	64·3	59·7	58·2	4·0	9·4	1·9	+ 7·1	S	SW	3·0	0·0	1·0	150	0·03
26	New	29·867	67·0	55·3	59·8	53·7	68·0	51·8	59·7	58·2	6·1	10·8	0·2	+ 5·1	SW	SW	5·0	0·0	0·8	55	1·55
27	..	29·888	63·0	53·8	56·2	53·5	66·0	..	60·7	59·5	2·7	7·9	0·0	+ 1·7	Calm	Calm	0·0	0·0	0·0	10	0·27
28	..	29·621	67·2	52·7	58·7	52·5	80·0	49·0	60·7	59·5	6·2	11·6	1·2	+ 4·4	Calm	SW	3·0	0·0	0·3	115	0·01
29	..	29·579	67·0	49·1	56·5	47·5	85·0	45·0	59·7	58·4	9·0	15·6	3·6	+ 2·5	SW	SW	3·5	0·0	0·8	145	0·03
30	..	29·677	61·5	49·2	56·2	55·6	61·5	45·0	59·7	58·4	0·6	3·2	0·0	+ 2·4	S	SW	5·0	0·0	1·5	155	0·11
Means	..	29·709	67·1	49·0	56·7	49·9	77·5	45·5	62·4	61·1	6·7	13·6	2·0	+ 0·2	...	...	..	..	..	Sum 2915	Sum 3·80

BAROMETER READINGS.

The first maximum in the month was 29^{in}·686 on the 2nd; the first minimum in the month was 29^{in}·494 on the 2nd.
The second maximum ,, was 30^{in}·029 on the 5th; the second minimum ,, was 29^{in}·597 on the 6th.
The third maximum ,, was 29^{in}·873 on the 8th; the third minimum ,, was 29^{in}·676 on the 9th.
The absolute maximum ,, was 30^{in}·183 on the 11th; the fourth minimum ,, was 29^{in}·316 on the 16th.
The fifth maximum ,, was 29^{in}·911 on the 18th; the absolute minimum ,, was 29^{in}·247 on the 21st.
The sixth maximum ,, was 29^{in}·920 on the 27th; the sixth minimum ,, was 29^{in}·544 on the 28th.
The range in the month was 0^{in}·936.
The mean for the month was 29^{in}·709, being 0^{in}·130 *lower* than the average of the preceding 18 years.

TEMPERATURE OF THE AIR.

The highest in the month was 76°·0 on the 24th; the lowest was 41°·5 on the 12th and 20th.
The range ,, was 34°·5.
The mean ,, of all the highest daily readings was 67°·1, being 0°·6 *lower* than the average of the preceding 18 years.
The mean ,, of all the lowest daily readings was 49°·0, being 0°·1 *lower* than the average of the preceding 18 years.
The mean daily range was 18°·1, being 0°·5 *lower* than the average of the preceding 18 years.
The mean for the month was 56°·7, being 0°·4 *lower* than the average of the preceding 18 years.

MONTH and DAY, 1859.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Sept. 1	m	m : s	0 : 7, cu. ci.-cu. ci	10 : 0, t
2	w	0	10 : 10, th-r	10, th-r
3	0	0	10. f	10, cu, ci.-cu, ci : 5, cu, ci.-cu : 0, h
4	w	0	7, ci.-cu	7,ci.-h : 5, ci.-cu, ci
5	0	0	0	0 : 3, ci.-s
6	s	s **N**, s **P**, sps. g cur : 0	10. h.-r : 10, oc.-r	5, ci.-s, sc, t, oc.-r
7	w	0 : w	7, ci.-cu, ci.-s : 10, ci.-s	7, cu, ci.-cu, ci
8	w	0	10, ci.-s : 5	5 : 10, oc.-r
9	0	0 : m	10, ci.-s, sc : 10, r	2, ci.-cu, ci
10	w	w : s	0	7, ci.-cu, ci : 10
11	s	0 : s	7, cu.-s, ci.-s, h	7, cu, cu.-s, ci.-s : 0
12	s	s : w	3, ci.-cu, ci	3, ci.-cu, ci : 10, ci.-cu, ci.-s
13	0	0 : s	10. ci.-s, r	7, cu, ci.-cu, ci : 2, ci, r : 10, r
14	0	0 : w	10, h.-r	10, h.-sh-.-r : 7, ci.-cu, ci.-s
15	0	s **N**. sps, g cur	10, ci.-s, r	7, cu, ci.-cu, ci : 10, h.-r : 7, ci.-s, f
16	0	s **N**. s **P**. sps. g cur : 0	10 : 3. ci.-cu. ci	10, oc.-r : 5
17	0	0 : s, g cur	7, ci-s, oc.-r	7, cu, cu.-s : 0
18	0	0 : w	7, cu, ci.-cu, ci, h	7, cu, ci.-cu, ci : 10, ci.-s : r
19	0	0	3, ci	3, ci.-cu, ci : 0, f
20	0	0 : w	9, ci.-cu, ci.-s.	3, cu, ci.-cu, ci : 0
21	0	0	10, h.-r	10, oc.-r : 0
22	w	0	3, ci.-s, sc	10, ci.-s : r
23	0	0	10, oc.-r	10 : 7, s, ci.-s
24	0	0 : w	3, ci	0 : 8, ci.-s : 0, a
25	0	0 : w	10, ci.-s : oc.-r	10, ci.-s : 9, ci.-s
26	w	0	10, ci.-cu, ci.-s	10, r : h.-r
27	0	0	10, ci.-s	10, ci.-s : 7 : r
28	0	0 : w	8, ci.-cu, ci.-s	8, ci.-cu, ci.-s : oc.-r : l
29	w	0 : w	3, ci.-cu, ci	5, ci.-cu. ci : 0
30	0	0	10, oc.-r	10, oc.-r : 0

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 61°·3 on the 23rd and 25th; and the lowest was 42°·6 on the 1st.
The mean ,, was 49°·9, being 1°·3 *lower* than the average of the preceding 18 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot361$, being $0^{\text{in}}\cdot023$ *less* than the average of the preceding 18 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $3^{\text{gr}}\cdot9$, being $0^{\text{gr}}\cdot3$ *less* than the average of the preceding 18 years.

Degree of Humidity.—The mean for the month was 75 (that of Saturation being represented by 100), being 6 *less* than the average of the preceding 18 years.

Weight of a Cubic Foot of Air.—The mean for the month was 532 grains, being 2 grains *less* than the average of the preceding 18 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·9.

WIND.

The proportions were of N. 8, S. 9, W. 12, and E. 1. The greatest pressure in the month was $8^{\text{lbs}}\cdot0$ on the square foot on the 6th and 17th.

RAIN.

Fell on 17 days in the month, amounting to $3^{\text{in}}\cdot8$, as measured in the simple cylinder gauge partly sunk below the ground; being $1^{\text{in}}\cdot4$ *greater* than the average fall of the preceding 44 years.

MONTH and DAY, 1859.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 18 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 24 Obs.	Whewell's and Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches read at 9h P.M.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
Oct. 1	..	29·704	68·4	57·0	61·1	57·7	76·5	51·0	59·7	58·2	3·4	7·2	1·1	+ 7·6	S	SW	5·0	0·0	1·8	155	0·00
2	Greatest Declination S.	30·062	68·0	55·5	59·4	53·2	70·0	55·3	60·7	59·5	6·2	8·9	3·8	+ 6·0	SW	SW	2·0	0·0	0·1	95	0·00
3	First Qr.	29·940	73·0	57·3	63·9	57·8	85·2	53·0	60·7	59·5	6·1	12·4	2·5	+10·8	S	S ; SE	0·0	0·0	0·0	50	0·00
4	..	29·728	81·0	55·2	66·8	60·1	96·2	50·3	61·7	60·7	6·7	16·3	1·7	+13·8	SE	S	0·0	0·0	0·0	40	0·00
5	..	29·848	70·8	52·5	60·8	57·7	75·0	47·5	61·7	60·7	3·1	9·9	1·9	+ 8·0	Calm	Calm	0·0	0·0	0·0	15	0·00
6	Apogee	29·820	71·5	56·5	62·7	57·3	85·0	52·0	62·2	61·0	5·4	10·3	2·5	+10·2	Calm	E	2·5	0·0	0·3	85	0·00
7	..	29·691	73·0	59·5	63·2	59·4	85·0	56·0	62·2	61·0	3·8	10·3	0·4	+10·9	E ; SE	SSE	2·0	0·0	0·1	15	0·09
8	..	29·764	65·5	53·9	58·1	56·9	71·4	54·0	62·2	61·0	1·2	5·5	0·2	+ 6·0	SSE	Calm	0·0	0·0	0·0	5	0·30
9	..	29·640	65·3	49·5	57·6	56·9	72·6	46·5	61·7	60·5	0·7	7·0	0·1	+ 5·7	Calm ; E	ENE	3·3	0·0	1·2	110	0·03
10	In Equator	29·460	62·1	54·7	56·3	53·0	62·2	..	61·7	60·5	3·3	4·6	1·8	+ 4·6	E	NE	2·7	0·0	1·0	85	0·26
11	Full	29·375	58·0	51·5	53·9	52·6	60·3	49·3	61·7	60·5	1·3	3·6	0·8	+ 2·5	N ; NNW	Calm	0·0	0·0	0·0	40	0·38
12	..	29·563	62·9	45·7	53·6	53·6	67·0	43·0	61·7	60·5	0·0	0·0	0·0	+ 2·6	Calm	Calm	0·0	0·0	0·0	5	0·40
13	..	29·587	60·7	48·5	53·1	51·8	70·8	46·0	61·7	60·5	1·3	6·5	0·0	+ 2·6	Calm	SE	0·0	0·0	0·0	5	0·00
14	..	29·453	66·0	48·8	56·6	52·6	75·0	45·0	61·2	60·2	4·0	11·8	1·2	+ 6·5	E	E	2·0	0·0	0·2	50	0·00
15	..	29·365	60·0	50·5	56·1	54·7	60·8	48·0	61·2	60·2	1·4	5·1	0·0	+ 6·3	ENE	ENE	0·0	0·0	0·0	10	0·03
16	Greatest Declination N.	29·360	64·5	52·3	55·9	53·6	73·0	52·0	61·2	60·2	2·3	4·4	0·8	+ 6·3	Calm ; SSW	SW	4·0	0·0	0·7	125	0·13
17	..	29·599	62·5	50·8	55·6	53·4	63·0	48·0	60·7	59·6	2·2	5·7	0·4	+ 6·2	SSW	W ; SW	2·3	0·0	0·4	35	0·38
18	..	29·831	58·0	45·5	51·0	51·0	59·4	42·0	59·7	58·5	0·0	2·2	0·0	+ 1·8	Calm	Calm	0·0	0·0	0·0	5	0·03
19	Last Qr.	29·744	58·0	48·5	52·6	51·4	63·0	45·0	59·7	58·5	1·2	5·9	0·0	+ 3·5	Calm	SW	0·0	0·0	0·0	70	0·07
20	..	29·323	60·0	44·5	50·2	47·5	70·0	42·0	58·7	57·7	2·7	10·8	0·0	+ 1·1	SW	W ; NNE	1·0	0·0	0·0	65	0·05
21	..	29·172	44·0	32·7	36·8	27·6	53·0	32·0	57·7	56·7	9·2	14·3	6·2	−12·1	N	NW	2·5	0·0	0·6	115	0·00
22	Perigee	29·399	49·5	28·0	36·3	30·5	63·0	20·0	55·7	54·5	5·8	11·3	2·8	−12·3	W	W ; SW	2·0	0·0	0·3	60	0·00
23	In Equator	29·259	39·7	28·6	33·3	32·6	40·2	23·0	..	..	0·7	3·7	0·0	−15·0	Calm	Calm	0·0	0·0	0·0	25	0·00
24	..	29·313	39·0	26·5	32·1	31·1	39·0	25·0	..	..	1·0	4·5	0·0	−15·8	S	S ; SW	0·0	0·0	0·0	Robinson's 53	0·18
25	..	29·213	48·0	26·8	38·1	37·6	48·0	21·1	..	..	0·5	3·3	0·0	− 9·4	SW ; SE	SE ; S	4·5	0·0	1·0	433	0·75
26	New	29·258	52·0	36·0	42·1	36·7	52·0	31·0	..	..	5·4	9·0	4·5	− 5·3	SW	SW	13·0	0·0	6·0	373	0·00
27	..	29·745	43·2	30·8	36·7	34·8	43·4	25·0	..	..	1·9	5·6	0·0	−10·5	SW	SW	0·0	0·0	0·0	159	0·03
28	..	29·504	56·0	33·8	45·6	43·9	65·0	29·5	..	..	1·7	8·8	0·8	− 1·4	SSW	SW	5·0	0·0	1·0	333	0·20
29	Greatest Declination S.	29·235	50·0	37·8	42·6	37·3	55·4	34·0	..	..	5·3	8·6	4·8	− 4·2	SW	W	4·0	0·0	0·5	267	0·00
30	..	29·189	47·5	34·8	41·7	38·8	58·0	28·0	..	..	2·9	7·7	0·2	− 4·9	SW	SE ; NW	3·5	0·0	0·4	211	0·23
31	..	29·067	51·0	40·7	45·3	41·5	61·6	38·0	..	..	3·8	8·0	1·3	− 1·2	NW	SE ; SW	6·0	0·0	1·0	425	0·04
Means	..	29·523	59·0	45·0	50·9	47·8	65·2	41·1	60·7	59·6	3·1	7·5	1·3	+ 1·0	...	...	..	..	..	Sum Whew. 23 days. 1265 Sum Rob. 8 days 2254	Sum 3·60

BAROMETER READINGS.

The absolute maximum in the month was 30$^{\text{in}}$·082 on the 2nd ; the first minimum in the month was 29$^{\text{in}}$·702 on the 4th.
The second maximum ,, was 29$^{\text{in}}$·892 on the 5th ; the second minimum ,, was 29$^{\text{in}}$·320 on the 10th.
The third maximum ,, was 29$^{\text{in}}$·638 on the 13th ; the third minimum ,, was 29$^{\text{in}}$·356 on the 15th.
The fourth maximum ,, was 29$^{\text{in}}$·861 on the 18th ; the fourth minimum ,, was 29$^{\text{in}}$·160 on the 21st.
The fifth maximum ,, was 29$^{\text{in}}$·440 on the 22nd ; the fifth minimum ,, was 29$^{\text{in}}$·245 on the 23rd.
The sixth maximum ,, was 29$^{\text{in}}$·389 on the 25th ; the sixth minimum ,, was 28$^{\text{in}}$·931 on the 25th.
The seventh maximum ,, was 29$^{\text{in}}$·785 on the 27th ; the absolute minimum ,, was 28$^{\text{in}}$·915 on the 30th.
The eighth maximum ,, was 29$^{\text{in}}$·195 on the 31st.
The range in the month was 1$^{\text{in}}$·167. The mean for the month was 29$^{\text{in}}$·523, being 0$^{\text{in}}$·168 *lower* than the average of the preceding 18 years.

TEMPERATURE OF THE AIR.

The highest in the month was 81°·0 on the 4th; the lowest was 26°·5 on the 24th; and the range in the month was 54°·5.
The mean ,, of all the highest daily readings was 59°·0, being 0°·7 *higher* than the average of the preceding 18 years.
The mean ,, of all the lowest daily readings was 45°·0, being 1°·4 *higher* than the average of the preceding 18 years.
The mean daily range was 14°·0, being 0°·7 *lower* than the average of the preceding 18 years.
The mean for the month was 50°·9, being 1°·3 *higher* than the average of the preceding 18 years.

WHEWELL'S ANEMOMETER was in the hands of Mr. Simms for repair from October 24 to December 1.

MONTH and DAY, 1859.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Oct. 1	0	0	10, r	10, cu.-s, ci.-s : 0, a
2	0	0 : w	10, cu.-s, ci.-s	5, ci.-cu, ci.-s : 10
3	0	0 : w	7, ci.-cu, ci.-s	0
4	0	0	0	0
5	0	0	0, f	7, cu-s, ci.-s : 0
6	0	m : 0	7, ci.-cu, ci.-s	0
7	0	0	10	10, oc.-r
8	0	0 : w	10, r	8, ci.-s : 0
9	w	w	7, cu, ci.-cu, ci	7, cu, ci.-cu, ci : 10
10	0	0	10, r	5, ci.-s, n
11	0	0	10, r	10, ci.-cu, cu.-s, ci.-s
12	0	0 : w	10, r	10, t.-s : f, a
13	0	s : w	10, ci.-s	10, ci.-s : lu.-ha
14	s	s : w	5, ci.-cu, ci.-s	5, ci.-cu, ci.-s : 10
15	0	0	10, ci.-s	10 : oc.-r
16	0	0 : w	10, ci.-s, sc, oc.-r	7, cu.-s, ci.-s : 10, l.-r : l
17	m	m	10, ci.-cu, ci.-s, r	10, cu.-s, ci.-s : 0 : a
18	w	0	10, th.-f	10
19	0	0 : w	10	10, r : 0, f, a
20	v	v : N, w	10	7, cu.-s, ci.-s : 10 : r
21	0	0	0	10, ci.-cu, ci.-s : 0 : 10
22	w	v : ss	0, h.-f	5, cu, ci.-cu : 0, l
23	m	m	10, ci, h, h.-f	10 : 0, f
24	0	0 : s	7, ci.-s, f, h.-f	10, sn : 5, ci : th.-f
25	0	0 : s, N	10, f, h.-f	10 : 10, r
26	0	0	10, ci.-s, sc	10 : 0
27	0	0	10, ci.-s, f	10, f, oc.-r : 0
28	0	0 : N, w	10	8, ci.-cu, ci.-s
29	0	0 : w	10, ci.-s	10, ci.-s : 0
30			7, ci	10, th.-r
31			10 : 5, ci.-cu, ci	10 : th.-r

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 61°·7 on the 4th and 7th; and the lowest was 25°·6 on the 21st.

The mean „ was 47°·8, being 2°·0 *higher* than the average of the preceding 18 years.

Elastic Force of Vapour.—The mean for the month was 0in·334, being 0in·024 *greater* than the average of the preceding 18 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 3gr·7, being 0gr·2 *greater* than the average of the preceding 18 years.

Degree of Humidity.—The mean for the month was 89 (that of Saturation being represented by 100), being [illegible] than the average of the preceding 18 years.

Weight of a Cubic Foot of Air.—The mean for the month was 535 grains, being 4 grains less than the average of the preceding 18 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·2.

WIND.

The proportions were of N. 4, S. 15, W. 6, and E. 6. The greatest pressure in the month was 15lbs·0 on the square foot on the 26th.

RAIN.

Fell on 18 days in the month, amounting to 3in·6, as measured in the simple cylinder gauge partly sunk below the ground; being 0in·8 *greater* than the average fall of the preceding 44 years.

ELECTRICITY.—October 30. The insulating lamp was not burning till November 3.

MONTH and DAY, 1859.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest.	Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Greatest.	Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 18 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	P.M.	Pressure in lbs. on the square foot. Greatest.	Least.	Mean of 24 Obs.	Amount of Horizontal Movement of the Air on each Day.	Rain in Inches read at 9h P.M.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
Nov. 1	..	28·756	58·0	45·8	51·4	42·8	63·3	41·2	..	..	8·6	11·6	7·6	+ 5·0	SW	WSW	20·0	2·0	9·0	572	0·08
2	First Qr.	29·636	55·0	44·7	48·3	43·8	64·0	40·0	..	..	4·5	8·2	0·6	+ 2·1	W	SW	3·0	0·0	0·7	282	0·28
3	Apogee	29·583	55·1	40·7	47·2	41·4	67·7	33·8	..	..	5·8	10·2	1·5	+ 1·1	SW	SW; SE	1·0	0·0	0·0	222	0·02
4	..	28·997	54·0	41·0	48·9	48·3	54·0	35·0	..	..	0·6	1·6	0·0	+ 3·0	SE	SW	4·0	0·0	0·8	328	0·28
5	..	29·295	56·2	41·8	50·3	45·3	63·0	36·5	..	..	5·0	11·6	3·1	+ 4·6	SW	SW	17·0	1·0	6·5	567	0·24
6	In Equator	29·360	60·4	51·1	54·2	49·1	65·7	42·0	49·8	49·5	5·1	10·1	4·4	+ 8·7	SW	SW	13·0	1·0	6·0	653	0·51
7	..	29·559	56·5	47·5	51·3	43·5	66·2	45·0	49·8	49·5	7·8	12·6	2·7	+ 6·2	SW	SW	12·0	0·0	3·8	368	0·07
8	..	29·626	51·8	41·8	46·1	39·0	59·0	..	49·3	48·7	7·1	10·2	3·2	+ 1·3	WSW	WSW; NW	11·0	0·0	3·0	434	0·00
9	..	30·241	44·0	35·3	38·5	30·6	54·0	28·5	49·3	48·7	7·9	10·1	4·2	− 6·0	NW	N	4·0	0·0	0·5	153	0·00
10	Full	30·555	45·5	29·0	37·0	32·5	50·0	20·0	48·3	48·3	4·5	10·6	3·7	− 7·3	N	N : E	0·0	0·0	0·0	72	0·00
11	..	30·502	49·0	30·7	39·5	33·7	59·3	29·5	48·3	48·3	5·8	13·4	0·0	− 4·5	SE	SE	2·0	0·0	0·0	100	0·00
12	..	30·308	49·0	30·0	39·0	31·2	55·0	23·0	47·8	47·8	7·8	13·4	3·4	− 4·9	SE	SE	0·0	0·0	0·0	85	0·00
13	Greatest Declination N	30·209	47·0	30·5	38·6	33·9	58·0	22·0	46·8	46·8	4·7	8·2	3·0	− 4·9	SE	E	0·0	0·0	0·0	43	0·00
14	..	30·150	44·2	25·3	33·8	31·4	48·0	19·7	45·8	45·0	2·4	10·3	0·0	− 9·5	Calm	Calm	0·0	0·0	0·0	65	0·00
15	..	30·154	41·0	26·5	33·8	33·8	41·0	18·5	44·8	44·8	0·0	0·9	0·0	− 9·2	Calm	N by E	0·0	0·0	0·0	141	0·00
16	Perigee	30·085	48·0	32·0	38·9	37·0	53·5	24·0	44·6	44·6	1·9	5·3	0·0	− 3·7	NNE	NNE	1·0	0·0	0·0	149	0·00
17	Last Qr.	30·086	46·8	34·2	39·1	35·3	55·0	30·0	43·9	43·9	3·8	6·2	1·9	− 3·3	NNE	NE	0·0	0·0	0·0	83	0·00
18	..	30·207	46·3	28·5	38·7	36·2	55·0	23·0	43·9	43·9	2·5	6·2	0·0	− 3·5	SSW	SW	3·0	0·0	0·3	167	0·00
19	In Equator	30·158	49·0	33·5	40·2	35·0	58·0	30·0	43·9	43·9	5·2	9·9	3·6	− 2·0	SW	SW; SE	0·0	0·0	0·0	141	0·00
20	..	29·853	41·2	30·0	35·3	32·9	52·0	18·0	43·9	43·9	2·4	6·0	2·0	− 7·1	SE	SE	0·0	0·0	0·0	121	0·00
21	..	29·658	51·3	29·0	39·6	38·0	63·0	23·0	43·9	43·9	1·6	8·6	0·0	− 2·4	ESE	SE	0·0	0·0	0·0	64	0·00
22	..	29·835	50·0	28·8	40·4	40·4	52·0	25·5	43·0	43·0	0·0	2·7	0·0	− 1·3	SSE	SW; S	0·0	0·0	0·0	30	0·02
23	..	29·905	53·0	30·3	41·8	41·8	57·0	28·0	42·6	42·6	0·0	6·4	0·0	+ 0·4	S; SE	ESE	0·0	0·0	0·0	111	0·00
24	New	29·853	52·7	38·8	44·7	42·4	61·0	34·0	42·6	42·6	2·3	7·2	0·4	+ 3·7	ESE	E by S	2·0	0·0	0·3	166	0·00
25	..	29·836	44·7	37·7	39·7	36·6	41·5	32·0	42·6	42·6	3·1	6·8	1·9	− 1·1	ESE	SE	1·5	0·0	0·0	83	0·00
26	Greatest Declination S	29·639	53·0	37·5	46·6	46·4	54·6	31·7	42·6	42·6	0·2	4·2	0·0	+ 5·7	ESE	SW	2·0	0·0	0·0	180	0·09
27	..	29·875	48·0	38·9	43·0	37·5	49·8	33·3	43·0	43·0	5·5	7·8	4·8	+ 1·9	NW; W	W; SW	4·0	0·0	1·1	261	0·09
28	..	29·750	45·5	35·8	40·4	36·1	47·6	31·0	43·0	43·0	4·3	8·8	0·4	− 1·1	SW	NW; SW	4·3	0·0	1·1	268	0·61
29	..	29·625	44·2	35·9	39·7	37·1	44·2	30·0	43·0	43·0	2·6	4·6	1·8	− 1·9	WSW	SW; Calm	2·0	0·0	0·0	100	0·14 Melted snow.
30	..	29·410	40·4	32·2	36·2	34·0	43·2	23·5	42·6	42·6	2·2	4·3	0·0	− 5·4	E; N	N	3·0	0·0	0·4	255	0·47
Means	..	29·824	49·4	35·5	41·9	38·2	55·2	29·4	45·2	45·1	3·8	7·9	1·8	− 1·2	...	...	..	..	..	Sum 6264	Sum 2·90

BAROMETER READINGS.

The absolute minimum in the month was 28in·635 on the 1st.

The first maximum in the month was 29in·676 on the 2nd ; the second minimum ,, was 28in·936 on the 4th.
The absolute maximum .. was 30in·583 on the 10th ; the third minimum ,, was 30in·056 on the 17th.
The third maximum ,, was 30in·244 on the 18th ; the fourth minimum ,, was 29in·641 on the 21st.
The fourth maximum ,, was 29in·927 on the 23rd ; the fifth minimum ,, was 29in·519 on the 26th.
The fifth maximum ,, was 29in·969 on the 27th ; the sixth minimum ,, was 29in·369 on the 30th.
The range in the month was 1in·948.
The mean for the month was 29in·824, being 0in·068 *higher* than the average of the preceding 18 years.

TEMPERATURE OF THE AIR.

The highest in the month was 60°·4 on the 6th ; the lowest was 25°·5 on the 14th ; and the range in the month was 34°·9.
The mean ,, of all the highest daily readings was 49°·4, being the same as the average of the preceding 18 years.
The mean ,, of all the lowest daily readings was 35°·5, being 2°·5 *lower* than the average of the preceding 18 years.
The mean daily range was 13°·9, being 2°·4 *higher* than the average of the preceding 18 years.
The mean for the month was 41°·9, being 1°·7 *lower* than the average of the preceding 18 years.

TEMPERATURE OF THE THAMES.

During a part of this month, there was a slight inconsistency in the readings of the two thermometers, which could not be explained. The mean of the two readings is inserted in both columns.

MONTH and DAY, 1859.	ELECTRICITY.		CLOUDS AND WEATHER	
	A.M.	P.M.	A.M.	P.M.
Nov. 1			9	9, cu.-s, ci.-s, oc.-r
2			10, ci.-s : 5, ci.-cu, ci	5, ci.-cu, ci : 10, oc.-r
3	o	o	o	3, cu, ci.-cu : o, lu.-ha
4	o	o	o, r	10, r
5	o	o	o	9 : r
6	ss, sps, g cur	ss, sps, g cur	5, ci.-cu, ci.-s, fr.-sqs.-w.-r	9, ci.-s, h.-shs-r : l
7	o	o	7, cu-s, ci.-s, r	3, ci.-cu, ci : 10, ci.-s
8	o	sN, s **P**, sps, g cur : o	3, ci.-cu, ci	10, ci.-s : 8 oc.-r
9	o	o : w	o	7, ci.-cu, ci : o
10	o	o : w	5, ci.-s, f	5, ci.-s : 10, ci.-s
11	o	o	9, ci.-cu, ci.-s, f, h.-f	2, ci.-cu, ci.-s : 10, ci.-cu, ci, lu.-cor
12	o	o	8, ci.-s	8 ci.-s. : lu.-ha
13	o	o	10, ci.-s : 3	3 : o
14	o	o : w	2, ci, f : 10, f	10, f
15	o	o	10, th.-f	10, f : 5, s
16	o	o	7, cu.-s, ci.-s	o : 10 : 1, h
17	o	o : w	10, cu.-s, ci.-s	5, ci.-cu, ci : 10
18	o	o	7, th.-f	7, ci.-cu, ci.-s : 10
19	o	o	5, cu, ci.-cu, ci	5 : o : f
20	ss	ss	o, h	o : 10
21	v	v	7, h	o : f
22	s	s	o, f, h.-f : o	10, cu.-s, ci.-s
23	s	s	10, f : o	o : 10, f
24	s	s	o	o
25	s	s	10, ci.-s	10, ci.-s, r
26	v	v	10, cu.-s, ci.-s, h	10, s, ci.-s
27	s	s : o	10, oc.-r	10, ci.-cu, ci.-s : 5, ci.-s : o
28	o	o : w	10, th.-r : 5, ci.-cu, ci	5, ci.-s : o
29	m	m : s, **N**	10, ci.-cu, ci.-s	10, s, ci.-s : sn, r
30	w	w : s	10, ci.-s, th.-r	10, cu.-s, ci.-s : 3, h

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 52°·7 on the 5th; and the lowest was 28°·1 on the 10th.

The mean ,, was 38°·2, being 2°·1 *lower* than the average of the preceding 18 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot231$, being $0^{in}\cdot026$ *less* than the average of the preceding 18 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{gr}\cdot6$, being $0^{gr}\cdot3$ *less* than the average of the preceding 18 years.

Degree of Humidity.—The mean for the month was 87 (that of Saturation being represented by 100), being 2 less than the average of the preceding 18 years.

Weight of a Cubic Foot of Air.—The mean for the month was 551 grains, being 4 grains *greater* than the average of the preceding 18 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 5·9.

WIND.

The proportions were of N. 6, S. 9, W. 8, and E. 7. The greatest pressure in the month was $20^{lbs}\cdot0$ on the square foot on the 1st.

RAIN.

Fell on 13 days in the month, amounting to $2^{in}\cdot9$ as measured in the simple cylinder gauge partly sunk below the ground; being $0^{in}\cdot5$ *greater* than the average fall of the preceding 44 years.

MONTH and DAY, 1859.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 18 Years.	WIND AS DEDUCED FROM ANEMOMETERS.							Rain in Inches read at 9h P.M.
			Dry.			Dew Point.	Highest in the Sun, as shewn by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning.						OSLER'S.					WHEWELL'S.	ROBINSON'S.	
															General Direction.		Pressure in lbs. on the square foot.			Amount of Horizontal Movement of the Air on each Day.		
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Hours.			
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	inches	miles	in.
Dec. 1	Apogee	29·601	40·6	32·7	36·4	34·2	40·6	28·0	42·2	42·2	2·2	4·1	0·0	− 5·3	NW	N	4·0	0·0	1·3	120	289	0·00
2	First Qr.	29·835	36·9	29·8	33·4	32·0	37·0	25·0	41·2	41·2	1·4	2·6	0·7	− 8·4	NE	NE	1·0	0·0	0·0	60	164	0·04
3	In Equator	30·044	35·3	29·0	32·1	27·9	36·0	25·0	40·7	40·7	4·2	6·2	2·6	− 9·6	NE	NE	0·0	0·0	0·0	65	131	0·04
4	..	29·638	43·4	26·9	36·7	35·9	43·4	23·9	40·7	40·7	0·8	2·0	0·0	− 4·8	S	SW	12·0	0·0	3·6	210	606	0·09
5	..	29·319	55·5	40·0	47·9	45·6	55·5	36·0	40·3	40·3	2·3	6·4	1·3	+ 6·5	SW	SW	11·0	0·0	4·8	110	386	0·30
6	..	29·520	48·8	38·5	44·2	40·8	48·8	32·0	41·2	41·2	3·4	6·7	2·0	+ 3·1	SW	SSW	10·0	0·0	0·9	..	302	0·09
7	..	29·876	48·7	37·3	42·3	38·3	55·0	33·0	41·2	41·2	4·0	7·4	0·7	+ 1·6	SSW	SE	6·0	0·0	0·3	..	155	0·01
8	..	30·111	48·0	37·8	42·0	40·1	54·0	30·3	41·7	41·7	1·9	5·0	1·3	+ 1·4	SE	E	1·5	0·0	0·0	..	157	0·00
9	..	30·416	43·9	34·5	39·1	36·6	49·0	28·0	41·7	41·7	2·5	5·1	1·2	− 1·4	E	E	0·0	0·0	0·0	..	144	0·00
10	Full. Greatest Dec. N	30·578	43·0	31·8	37·0	34·9	50·4	24·3	40·7	40·7	2·1	5·3	0·6	− 3·4	E by S	ENE	3·5	0·0	0·5	45	156	0·00
11	..	30·440	42·5	27·2	30·8	30·8	33·0	21·0	41·2	41·2	0·0	0·7	0·0	− 9·4	NE	Calm	0·0	0·0	0·0	5	67	0·00
12	..	30·254	40·4	26·5	33·5	33·3	30·4	25·0	40·3	40·3	0·2	2·4	0·0	− 6·5	Calm	Calm	0·0	0·0	0·0	30	96	0·00
13	Perigee	30·100	37·2	29·5	33·5	29·0	37·2	28·5	40·3	40·3	4·5	8·6	1·0	− 6·1	N by E	N	0·0	0·0	0·0	120	281	0·00
14	..	29·818	30·9	25·8	27·9	16·5	30·9	21·7	39·3	39·3	11·4	14·3	5·6	−11·8	N	N	7·0	1·0	3·5	165	394	0·00
15	..	29·829	31·8	24·0	27·0	18·6	38·0	19·0	38·8	38·8	8·4	8·8	7·2	−13·0	N	N ; SW	5·0	0·0	1·5	20	91	0·00
16	In Equator; Last Quarter	29·556	30·2	21·5	25·1	20·3	33·6	15·0	38·3	38·3	4·8	7·8	2·9	−15·2	Calm	N	0·0	0·0	0·0	..	22	0·01
17	..	29·581	28·0	15·5	22·8	17·6	30·4	13·5	37·4	37·4	5·2	9·0	4·6	−17·3	Calm	SE	0·0	0·0	0·0	..	22	0·00
18	..	29·603	29·0	18·3	23·4	14·0	36·2	12·0	36·8	36·8	9·4	15·1	5·0	−16·5	Calm	SE	0·0	0·0	0·0	..	12	0·00
19	..	29·653	30·3	14·0	23·9	18·6	30·4	11·0	35·8	35·8	5·3	9·7	4·5	−15·6	SE	SSE	0·0	0·0	0·0	..	160	0·00
20	..	29·607	36·5	20·0	30·0	23·6	39·5	18·0	35·3	35·3	6·4	10·3	4·5	− 9·0	SW	SW	11·0	0·0	2·7	..	528	0·00
21	..	29·173	46·0	35·5	41·1	35·0	49·0	20·3	35·3	35·3	6·1	8·8	4·3	+ 2·7	SW	W	10·0	1·0	3·7	200	428	0·18
22	..	29·435	40·5	33·0	35·7	32·0	45·5	28·0	36·3	36·3	2·8	3·8	1·2	− 2·2	W	SW	0·0	0·0	0·0	..	91	0·00
23	Greatest Declination S.	29·354	37·3	32·5	34·7	33·6	41·0	28·0	36·3	36·3	1·1	1·8	0·5	− 2·7	SW	W ; SE	0·0	0·0	0·0	65	..	0·18
24	New	28·990	47·0	39·3	42·5	41·8	49·6	30·5	36·3	36·3	0·7	3·1	0·0	+ 5·2	SW	S	0·0	0·0	0·0	15	..	0·09
25	..	28·799	42·2	37·1	39·5	38·6	43·0	31·5	36·3	36·3	0·9	1·4	0·2	+ 3·0	SW	E	5·0	0·0	0·5	65	..	0·30
26	..	28·673	45·0	39·1	41·7	40·3	45·0	38·2	37·3	37·3	1·4	3·0	0·0	+ 5·3	SE	NW ; W	5·0	0·0	0·8	80	..	0·30
27	..	29·214	48·2	34·0	41·7	39·8	52·0	28·5	37·3	37·3	1·9	4·4	0·9	+ 5·2	SW	SW	3·0	0·0	0·2	..	..	0·12
28	..	29·082	48·0	38·5	43·9	41·5	48·5	31·7	38·3	38·3	2·4	4·2	1·2	+ 6·9	SSW	SW	8·0	0·0	2·5	..	..	0·14
29	Apogee	29·143	53·3	41·5	47·5	45·7	53·5	39·0	39·8	39·8	1·8	3·2	0·0	+10·2	SW	SW	10·0	0·0	3·9	..	..	0·09
30	In Equator	29·432	53·0	46·5	50·2	45·8	53·0	42·0	40·8	40·8	4·4	6·2	2·8	+12·8	SW	SW	11·0	2·0	5·0	290	..	0·14
31	..	29·580	56·5	48·3	52·8	50·7	56·5	43·0	40·8	40·8	2·1	3·2	1·2	+15·2	SW	SW	8·0	0·0	3·0	280	..	0·02
Means	..	29·623	41·5	31·8	36·8	33·4	43·4	26·8	39·0	39·0	3·4	5·8	1·9	− 2·6	...	...	..	..	..	Sum 1945	Sum 4679	Sum 2·17

BAROMETER READINGS.

The first maximum in the month was 30^{in}·066 on the 3rd; the first minimum in the month was 29^{in}·239 on the 5th.
The absolute maximum ,, was 30^{in}·590 on the 10th; the second minimum ,, was 29^{in}·542 on the 16th.
The third maximum ,, was 29^{in}·710 on the 20th; the third minimum ,, was 29^{in}·110 on the 21st.
The fourth maximum ,, was 29^{in}·448 on the 22nd; the absolute minimum ,, was 28^{in}·509 on the 26th.
The fifth maximum ,, was 29^{in}·251 on the 27th; the fifth minimum ,, was 29^{in}·032 on the 28th.
The sixth maximum ,, was 29^{in}·262 on the 29th; the sixth minimum ,, was 29^{in}·067 on the 29th.
The seventh maximum ,, was 29^{in}·670 on the 31st.
The range in the month was 2^{in}·081.
The mean for the month was 29^{in}·623, being 0^{in}·209 *lower* than the average of the preceding 18 years.

TEMPERATURE OF THE AIR.

The highest in the month was 56°·5 on the 31st; the lowest was 14°·0 on the 19th; and the range in the month was 42°·5.
The mean ,, of all the highest daily readings was 41°·5, being 3°·9 *lower* than the average of the preceding 18 years.
The mean ,, of all the lowest daily readings was 31°·8, being 4°·1 *lower* than the average of the preceding 18 years.
The mean daily range was 9°·7, being 0°·2 *higher* than the average of the preceding 18 years.
The mean for the month was 36°·8, being 3°·7 *lower* than the average of the preceding 18 years.

TEMPERATURE OF THE THAMES.

During a part of this month, there was a slight inconsistency in the readings of the two thermometers, which could not be explained. The mean of the readings is inserted in both columns.

MONTH and DAY, 1859.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Dec. 1	s P, s N	s P, s N	10	10, th.-r : 0
2	ss	ss	10 : sn, sl	10 : 9, ci.-cu, ci.-s, sn
3	s	s : ss, sps	10, ci.-cu, cu.-s, h : cu.-s	7, ci.-cu, ci.-s : 10
4	N, ss, sps	0	10, th.-r	10, th.-r
5	0	0	10, r	10, r : 2, ci
6	0	0	10	10 : h.-r : lu.-ha
7	0	0 : s	10 : 9, ci.-cu, ci.-s	10, h.-r : 0 : ci.-s, lu.-ha
8	s	s	7, cu.-s, ci.-s	0
9	s	s	8, ci.-s, h.-f	8, ci.-s : 10
10	s	s	0	0 : 10, s
11	s	s	10, f, h. f	10, f : th.-f
12	v	v	10, th.-r	10, th.-f
13	0 : w	w : 0	10	7, ci.-s : 0
14			0 : 9, cu.-s, ci.-s	9, cu.-s, ci.-s : sn
15			0	7, ci.-s : 0, h
16			10, h.-f	10, ci.-s, sn
17			7, ci.-s	7, ci.-s : 10
18			0	0
19			10, cu.-s, ci.-s	10, ci.-s, sn : 0
20			9, ci.-s	9, ci.-s : sn
21			10, cu.-s, ci.-s, r : 0	0
22			3, ci	3, ci : 10, r
23			10, th.-f : 5, ci.-cu : 8, ci.-s	10
24			1, ci : 9, ci.-cu, ci.-s	7, ci.-cu, ci.-s : 10 : r
25	s	s : N, ss	10	10 : r
26	0 : w	w : 0	10, f	10, m.-r : 8
27	0	0	2, ci.-cu, ci	7, ci.-cu, ci : 10, r : 0
28	s	0	10, r	10, r : 0, l
29	0	0	10, r	10, r : 4, ci
30	0	v	7, ci.-s : 10	10, s, ci.-s, oc.-r
31	0	0	10	10 : shs.-r : 10

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 52°·4 on the 31st; and the lowest was 11°·7 on the 18th.

The mean ,, was 33°·4, being 3°·9 *lower* than the average of the preceding 18 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot191$, being $0^{in}\cdot038$ *less* than the average of the preceding 18 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{grs}\cdot2$, being $0^{grs}\cdot4$ *less* than the average of the preceding 18 years.

Degree of Humidity.—The mean for the month was 88 (that of Saturation being represented by 100), being 1 *less* than the average of the preceding 18 years.

Weight of a Cubic Foot of Air.—The mean for the month was 553 grains, being 1 grain *greater* than the average of the preceding 18 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·2.

WIND.

The proportions were of N. 8, S. 10, W. 7, and E. 6. The greatest pressure in the month was $12^{lbs}\cdot0$ on the square foot on the 4th.

RAIN.

Fell on 17 days in the month, amounting to $2^{in}\cdot2$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{in}\cdot3$ *greater* than the average fall of the preceding 44 years.

ELECTRICITY.—The insulating lamp was not burning from December 14 to December 24.

MAXIMA AND MINIMA READINGS OF THE BAROMETER.

The following table contains the highest and lowest readings of the Barometer, reduced to 32° Fahrenheit, extracted from the photographic records. The readings are accurate; but the times are liable to great uncertainty, as the barometer frequently remains at its highest or lowest point through several hours. The time given is the middle of the stationary period. Where the symbol : follows the time, it denotes that the quicksilver has been sensibly stationary through a period of more than one hour.

	MAXIMA.	
	Approximate Mean Solar Time, 1859.	Reading.
	d h m	in.
January	2. 10. 50:	30·519
	9. 10. 50:	30·640
	13. 10. 50:	30·379
	20. 0. 0:	30·081
	24. 18. 0:	29·860
	28. 17. 45:	29·748
February	1. 4. 35:	29·816
	3. 10. 8:	30·082
	8. 11. 30:	29·442
	16. 20. 30	30·086
	22. 21. 30	30·503
	28. 23. 0:	30·186
March	4. 22. 0:	30·197
	9. 10. 45:	30·347
	16. 5. 30:	29·821
	19. 14. 30:	30·212
	21. 2. 15:	30·162
	31. 21. 38	30·157
April	5. 21. 30	30·035
	11. 22. 15:	29·567
	13. 15. 0:	29·344
	17. 11. 23:	29·764
	23. 0. 30:	29·716
	26. 10. 15:	30·005
May	2. 10. 30:	29·815
	11. 13. 30:	30·126
	22. 11. 15:	29·954
	31. 21. 30	29·714
June	5. 23. 15:	29·921
	14. 12. 30:	29·858
	17. 21. 45:	30·008
	24. 0. 30	29·974
	27. 4. 0:	29·995
July	4. 23. 0:	30·198

	MINIMA.	
	Approximate Mean Solar Time, 1859.	Reading.
	d h m	in.
January	6. 13. 45:	30·215
	12. 1. 52:	30·291
	18. 5. 30:	29·619
	23. 4. 20	29·060
	25. 13. 30	29·480
	30. 3. 15	29·316
February	2. 3. 45:	29·259
	5. 19. 23:	29·125
	9. 5. 52:	29·235
	17. 10. 40:	29·910
	26. 11. 38:	29·520
March	2. 13. 45:	30·018
	7. 19. 45:	29·549
	14. 17. 0:	28·945
	17. 13. 23:	29·432
	20. 21. 45:	29·746
	29. 17. 38:	29·015
April	1. 21. 0	29·800
	10. 20. 53:	29·094
	12. 15. 10:	29·075
	14. 14. 50	28·800
	20. 4. 30:	29·346
	23. 21. 40:	29·531
	28. 4. 43	29·410
May	4. 3. 53:	29·592
	19. 7. 23:	29·540
	30. 2. 30:	29·491
June	2. 11. 30:	29·432
	10. 22. 30:	29·450
	15. 22. 0:	29·706
	20. 3. 0:	29·678
	26. 1. 8:	29·732
	28. 6. 0:	29·735
July	12. 5. 30:	29·972

	MAXIMA.	
	Approximate Mean Solar Time, 1859.	Reading.
	d h m	in.
July	13. 22. 0:	30·143
	20. 10. 23:	29·874
	24. 22. 30:	30·007
August	1. 22. 0:	29·948
	5. 17. 30:	29·959
	10. 21. 30	29·899
	21. 15. 30:	30·184
	28. 10. 15:	29·850
September	1. 22. 0:	29·686
	4. 21. 45:	30·029
	7. 21. 23	29·873
	11. 0. 0:	30·183
	17. 23. 8:	29·911
	27. 0. 0	29·920
October	2. 9. 0:	30·082
	5. 11. 15:	29·892
	12. 21. 0:	29·638
	17. 23. 0:	29·861
	22. 9. 0	29·440
	24. 20. 45:	29·389
	27. 9. 20	29·785
	30. 21. 50	29·215
November	2. 2. 0	29·680
	10. 9. 45:	30·583
	18. 9. 15	30·244
	22. 21. 30:	29·927
	27. 7. 0	29·969
December	2. 23. 5:	30·066
	10. 0. 0:	30·590
	19. 18. 30:	29·710
	22. 7. 0:	29·448
	27. 11. 23:	29·270
	28. 20. 30	29·262
	31. 11. 30:	29·670

	MINIMA.	
	Approximate Mean Solar Time, 1859.	Reading.
	d h m	in.
July	18. 9. 53:	29·602
	22. 7. 30:	29·685
	30. 23. 0:	29·511
August	3. 18. 15:	29·665
	7. 19. 15:	29·640
	14. 21. 35	29·490
	26. 5. 15:	29·604
	30. 0. 0:	29·427
September	2. 10. 15:	29·494
	6. 4. 23	29·577
	8. 23. 8:	29·670
	15. 21. 50:	29·316
	21. 0. 45	29·220
	28. 18. 23:	29·530
October	4. 3. 15:	29·702
	10. 19. 30:	29·320
	15. 12. 30:	29·356
	21. 0. 0:	29·160
	23. 5. 30:	29·245
	25. 13. 15:	28·895
	30. 9. 15:	28·915
November	1. 1. 0	28·635
	4. 11. 8:	28·936
	16. 18. 8:	30·030
	21. 3. 10:	29·641
	26. 11. 20:	29·519
	29. 18. 0:	29·345
December	5. 0. 25	29·230
	16. 2. 35	29·535
	20. 21. 0	29·110
	25. 18. 38:	28·490
	28. 2. 0	29·010
	29. 2. 33	29·060

MONTHLY MEANS of RESULTS for METEOROLOGICAL ELEMENTS at the ROYAL OBSERVATORY, GREENWICH, in the YEAR 1859.

1859, Month.	Mean Reading of the Barometer.	Temperature of the Air.							Mean Temperature of Dew Point.
		Highest.	Lowest.	Range in the Month.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily Range.	Mean Temperature.	
	in.	°	°	°	°	°	°	°	°
January	30·037	53·0	28·5	24·5	45·5	35·5	10·0	40·4	37·1
February...........	29·823	59·0	30·5	28·5	50·4	36·3	14·1	43·1	37·7
March	29·806	63·5	28·9	34·6	54·2	40·5	13·7	46·4	40·1
April..............	29·614	70·0	25·3	53·7	56·9	39·1	17·8	46·0	39·8
May................	29·789	77·0	33·1	43·9	64·9	43·9	21·0	53·1	46·1
June	29·766	81·3	43·5	37·8	73·9	53·0	20·9	61·4	53·8
July...............	29·937	93·0	46·5	46·5	81·8	57·1	24·7	68·1	58·3
August	29·818	91·3	46·5	44·8	76·1	54·3	21·8	63·5	54·2
September..........	29·709	76·0	41·5	34·5	67·1	49·0	18·1	56·7	49·9
October............	29·523	81·0	26·5	54·5	59·0	45·0	14·0	50·9	47·8
November	29·824	60·4	25·5	34·9	49·4	35·5	13·9	41·9	38·2
December	29·623	56·5	14·0	42·5	41·5	31·8	9·7	36·8	33·4
Means	29·772	72·6	32·5	40·1	60·1	43·4	16·7	50·7	44·7

1859, Month.	Mean Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean additional Weight required to saturate a Cubic Foot of Air.	Mean Degree of Humidity. (Sat. = 100.)	Mean Weight of a Cubic Foot of Air.	Wind.				Mean Amount of Cloud. 0—10	Rain.	
						As deduced from Anemometers.					Number of Rainy Days.	Amount collected on the Ground.
						Osler's.		Whewell's.	Robinson's.			
						Prevailing Direction.	Mean Daily Pressure in lbs. on Square Foot.	Mean Daily Horizontal Movement in Miles.				
	in.	gr.	gr.		gr.							in.
January....	0·220	2·6	0·4	88	557	SW	1·24	105	..	7·5	11	0·8
February...	0·225	2·6	0·6	81	550	SW	0·91	151	..	6·3	12	0·9
March	0·247	2·8	0·8	79	546	SW	1·73	149	..	7·2	10	1·4
April......	0·237	2·8	0·8	78	542	SW	1·10	134	..	6·9	13	2·2
May........	0·312	3·6	0·9	77	538	NE	0·31	76	..	6·1	9	2·3
June.......	0·415	4·6	1·5	77	528	N	0·16	56	..	7·4	7	1·4
July.......	0·487	5·4	2·1	70	524	SW	0·17	57	..	5·1	7	3·3
August	0·421	4·7	1·8	72	527	SW	0·38	86	..	6·5	11	1·1
September..	0·361	3·9	1·2	75	532	NW and S	0·89	97	..	6·9	17	3·8
October....	0·334	3·7	0·4	89	535	S	0·53	55	..	7·2	18	3·6
November ..	0·231	2·6	0·5	87	551	Variable	1·12	..	[illegible]	5·9	13	[illegible]
December ..	0·191	2·2	0·4	88	553	N and SW	1·25	108	152	7·2	17	2·2
Means	0·307	3·5	0·9	80	540	..	..	..	..	6·7	Sum 145	Sum 25·[illegible]

During the month of November Whewell's Anemometer was in the maker's hands for repair.

During 6 days of January, 8 days of February, 11 days of March, 8 days of October, and 13 days of December, Whewell's Anemometer was not at work. The mean horizontal movement for these months has been formed from the remaining days.

READINGS OF THERMOMETERS SUNK IN THE GROUND.

(I.)—Reading of a Thermometer whose bulb is sunk to the depth of 25·6 feet (24 French feet) below the surface of the soil, at Noon on every Day, except Sundays, Good Friday, and December 26.

Day of the Month, 1859.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	52·00	51·35	50·65	49·95	*S*	49·37	49·52	50·18	51·20	52·18	52·83	52·93
2	*S*	51·29	50·64	49·95	49·52	49·37	49·55	50·25	51·25	*S*	52·85	52·90
3	51·97	51·28	50·62	*S*	49·52	49·36	*S*	50·23	51·28	52·25	52·86	52·88
4	51·97	51·27	50·62	49·94	49·48	49·38	49·54	50·27	*S*	52·30	52·83	*S*
5	51·95	51·25	50·58	49·92	49·50	*S*	49·56	50·30	51·35	52·29	52·87	52·88
6	51·90	*S*	*S*	49·92	49·45	49·37	49·58	50·30	51·40	52·32	*S*	52·90
7	51·88	51·19	50·52	49·90	49·52	49·37	49·62	*S*	51·42	52·34	52·95	52·87
8	51·86	51·15	50·45	49·87	*S*	49·37	49·63	50·36	51·47	52·35	52·98	52·87
9	*S*	51·15	50·43	49·84	49·48	49·37	49·65	50·38	51·49	*S*	52·92	52·91
10	51·82	51·13	50·43	*S*	49·45	49·37	*S*	50·45	51·46	52·38	52·95	52·87
11	51·83	51·10	50·42	49·80	49·46	49·32	49·68	50·50	*S*	52·40	52·97	*S*
12	51·82	51·08	50·40	49·72	49·46	*S*	49·73	50·55	51·60	52·44	52·97	52·83
13	51·78	*S*	*S*	49·68	49·45	49·37	49·73	50·58	51·60	52·45	*S*	52·82
14	51·75	51·02	50·35	49·68	49·45	49·37	49·74	*S*	51·62	52·50	52·97	52·80
15	51·72	51·00	50·30	49·65	*S*	49·40	49·74	50·62	51·68	52·50	52·98	52·78
16	*S*	51·00	50·32	49·70	49·42	49·38	49·80	50·67	51·72	*S*	52·99	52·75
17	51·70	50·98	50·28	*S*	49·40	49·38	*S*	50·70	51·76	52·60	52·97	52·74
18	51·70	50·92	50·25	49·60	49·40	49·40	49·88	50·74	*S*	52·60	53·00	*S*
19	51·66	50·90	50·24	49·60	49·40	*S*	49·90	50·78	51·82	52·58	52·96	52·70
20	51·65	*S*	*S*	49·60	49·40	49·40	49·85	50·85	51·85	52·60	*S*	52·72
21	51·62	50·86	50·17	49·58	49·39	49·40	49·93	*S*	51·88	52·63	53·00	52·73
22	51·60	50·82	50·15	Good Friday.	*S*	49·45	49·96	50·88	51·92	52·60	52·97	52·70
23	*S*	50·80	50·14	49·62	49·38	49·43	49·95	50·95	51·96	*S*	52·97	52·57
24	51·54	50·77	50·12	*S*	49·40	49·43	*S*	50·98	52·02	52·60	53·00	52·68
25	51·55	50·75	50·10	49·60	49·40	49·47	50·02	51·03	*S*	52·65	53·00	*S*
26	51·50	50·72	50·07	49·55	49·40	*S*	50·06	51·03	52·05	52·68	52·98	General Holiday.
27	51·48	*S*	*S*	49·52	49·38	49·50	50·10	51·05	52·04	52·68	*S*	52·61
28	51·45	50·68	50·04	49·50	49·38	49·50	50·12	*S*	52·07	52·74	52·93	52·60
29	51·42		50·02	49·57	*S*	49·50	50·15	51·13	52·10	52·75	52·93	52·60
30	*S*		49·80	49·50	49·38	49·52	50·15	51·13	52·14	*S*	52·93	52·57
31	51·35		49·95		49·38		*S*	51·16		52·78		52·57
Means	51·71	51·02	50·29	49·71	49·43	49·41	49·82	50·71	51·70	52·51	52·94	52·76

(II.)—Reading of a Thermometer whose bulb is sunk to the depth of 12·8 feet (12 French feet) below the surface of the soil, at the same times.

Day of the Month, 1859.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	50·10	48·32	47·50	47·50	*S*	49·30	52·20	55·33	56·90	56·82	56·10	53·03
2	*S*	48·14	47·50	47·54	47·95	49·35	52·30	55·50	57·00	*S*	56·00	52·90
3	50·05	48·25	47·50	*S*	47·95	49·40	*S*	55·58	57·10	56·80	55·90	52·77
4	50·00	48·22	47·50	47·60	47·87	49·50	52·48	55·62	*S*	56·82	55·80	*S*
5	49·95	48·20	47·47	47·60	48·00	*S*	52·54	55·70	57·10	56·75	55·72	52·67
6	49·90	*S*	*S*	47·60	47·90	49·70	52·64	55·77	57·12	56·70	*S*	52·53
7	49·82	48·10	47·45	47·65	48·17	49·75	52·78	*S*	57·18	56·70	55·50	52·40
8	49·75	48·05	47·37	47·60	*S*	49·80	52·86	55·96	57·18	56·65	55·38	52·30
9	*S*	48·05	47·30	47·62	48·10	49·95	52·95	55·96	57·25	*S*	55·20	52·17
10	49·65	48·00	47·38	*S*	48·10	50·05	*S*	56·08	57·10	56·60	55·10	52·08
11	49·60	47·95	47·30	47·60	48·14	50·05	53·17	56·20	*S*	56·56	55·08	*S*
12	49·55	47·95	47·38	47·48	48·17	*S*	53·30	56·30	57·20	56·60	55·00	51·85

(II.)—Reading of a Thermometer whose bulb is sunk to the depth of 12 French feet—*concluded.*

Day of the Month, 1859.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
13	49 ·49	*S*	*S*	47 ·48	48 ·22	50 ·40	53 ·36	56 ·40	57 ·20	56 ·57	*S*	51 ·78
14	49 ·38	47 ·85	47 ·38	47 ·48	48 ·25	50 ·48	53 ·41	*S*	57 ·15	56 ·60	54 ·75	51 ·62
15	49 ·30	47 ·80	47 ·38	47 ·48	*S*	50 ·62	53 ·52	56 ·40	57 ·18	56 ·60	54 ·65	51 ·55
16	*S*	47 ·80	47 ·39	47 ·70	48 ·30	50 ·70	53 ·63	56 ·50	57 ·22	*S*	54 ·63	51 ·45
17	49 ·20	47 ·75	47 ·40	*S*	48 ·35	50 ·80	*S*	56 ·51	57 ·24	56 ·57	54 ·45	51 ·35
18	49 ·18	47 ·10	47 ·40	47 ·64	48 ·42	50 ·95	53 ·95	56 ·60	*S*	56 ·53	54 ·46	*S*
19	49 ·10	47 ·65	47 ·40	47 ·68	48 ·48	*S*	54 ·00	56 ·70	57 ·25	56 ·55	54 ·28	51 ·17
20	49 ·00	*S*	*S*	47 ·72	48 ·50	51 ·15	54 ·03	56 ·75	57 ·10	56 ·52	*S*	51 ·10
21	48 ·95	47 ·65	47 ·42	47 ·75	48 ·58	51 ·25	54 ·20	*S*	57 ·00	56 ·44	54 ·18	51 ·07
22	48 ·88	47 ·60	47 ·42	Good Friday.	*S*	51 ·40	54 ·35	56 ·76	57 ·00	56 ·42	54 ·05	50 ·93
23	*S*	47 ·57	47 ·45	47 ·94	48 ·70	51 ·48	54 ·40	56 ·80	57 ·00	*S*	53 ·95	50 ·85
24	48 ·72	47 ·56	47 ·45	*S*	48 ·80	51 ·57	*S*	56 ·85	57 ·00	56 ·30	53 ·88	50 ·75
25	48 ·70	47 ·58	47 ·48	47 ·95	48 ·85	51 ·72	54 ·65	56 ·85	*S*	56 ·35	53 ·70	*S*
26	48 ·60	47 ·54	47 ·46	47 ·80	48 ·92	*S*	54 ·83	56 ·86	56 ·80	56 ·35	53 ·65	[illegible]
27	48 ·60	*S*	*S*	47 ·78	49 ·00	51 ·90	54 ·90	56 ·90	56 ·88	56 ·35	*S*	50 ·40
28	48 ·55	47 ·52	47 ·50	47 ·75	49 ·00	51 ·96	55 ·05	*S*	56 ·90	56 ·32	53 ·38	50 ·28
29	48 ·50		47 ·50	47 ·98	*S*	52 ·05	55 ·12	56 ·85	56 ·90	56 ·23	53 ·28	50 ·16
30	*S*		47 ·45	47 ·72	49 ·20	52 ·17	55 ·20	56 ·85	56 ·82	*S*	53 ·12	50 ·03
31	48 ·38		47 ·50		49 ·20		*S*	56 ·88		56 ·12		49 ·30
Means.	49 ·27	47 ·87	47 ·43	47 ·67	48 ·43	50 ·67	53 ·69	56 ·35	57 ·07	56 ·51	54 ·66	51 ·48

(III.)—Reading of a Thermometer whose bulb is sunk to the depth of 6·4 feet (6 French feet) below the surface of the soil, at the same times.

Day of the Month, 1859.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	47 ·26	46 ·10	46 ·10	47 ·60	*S*	52 ·95	57 ·95	62 ·67	62 ·12	58 ·93	54 ·60	49 ·67
2	*S*	45 ·90	46 ·08	47 ·58	48 ·60	53 ·20	58 ·10	62 ·60	62 ·02	*S*	54 ·35	49 ·50
3	47 ·30	46 ·02	46 ·00	*S*	48 ·70	53 ·45	*S*	62 ·80	61 ·88	58 ·88	54 ·10	49 ·33
4	47 ·25	45 ·98	46 ·04	47 ·40	48 ·61	53 ·75	58 ·34	62 ·75	*S*	58 ·90	53 ·95	*S*
5	47 ·15	45 ·92	46 ·10	47 ·40	48 ·84	*S*	58 ·46	62 ·76	61 ·60	58 ·80	53 ·80	49 ·04
6	47 ·05	*S*	*S*	47 ·45	48 ·80	54 ·20	58 ·63	62 ·80	61 ·43	58 ·80	*S*	48 ·80
7	46 ·98	45 ·80	46 ·38	47 ·52	49 ·10	54 ·50	58 ·80	*S*	61 ·28	58 ·82	53 ·20	48 ·63
8	46 ·90	45 ·72	46 ·48	47 ·62	*S*	54 ·80	58 ·94	62 ·66	61 ·20	58 ·85	53 ·23	48 ·55
9	*S*	45 ·68	46 ·60	47 ·80	49 ·30	55 ·00	59 ·12	62 ·40	61 ·00	*S*	53 ·31	48 ·50
10	46 ·72	45 ·63	46 ·79	*S*	49 ·50	55 ·20	*S*	62 ·60	60 ·84	58 ·90	53 ·40	48 ·47
11	46 ·60	45 ·60	46 ·82	48 ·42	49 ·70	55 ·36	59 ·52	62 ·65	*S*	58 ·88	53 ·38	*S*
12	46 ·40	45 ·60	46 ·82	48 ·35	49 ·90	*S*	59 ·77	62 ·63	60 ·72	58 ·88	53 ·25	48 ·33
13	46 ·30	*S*	*S*	48 ·50	50 ·02	55 ·90	59 ·75	62 ·60	60 ·50	58 ·92	*S*	48 ·24
14	46 ·20	45 ·62	46 ·80	48 ·60	50 ·20	56 ·00	60 ·15	*S*	60 ·38	58 ·90	52 ·80	48 ·05
15	46 ·20	45 ·73	46 ·80	48 ·60	*S*	56 ·20	60 ·40	62 ·10	60 ·30	58 ·85	52 ·53	47 ·95
16	*S*	45 ·82	46 ·95	48 ·78	50 ·50	56 ·30	60 ·67	62 ·15	60 ·20	*S*	52 ·30	47 ·75
17	46 ·08	45 ·82	46 ·98	*S*	50 ·67	56 ·40	*S*	62 ·12	60 ·03	58 ·60	52 ·00	47 ·60
18	46 ·00	45 ·90	47 ·12	48 ·50	50 ·80	56 ·50	61 ·20	62 ·15	*S*	58 ·49	51 ·70	*S*
19	45 ·88	45 ·98	47 ·20	48 ·40	50 ·97	*S*	61 ·30	62 ·12	59 ·77	58 ·40	51 ·50	47 ·12
20	45 ·80	*S*	*S*	48 ·28	51 ·02	56 ·72	61 ·41	62 ·10	59 ·60	58 ·30	*S*	46 ·90
21	45 ·90	46 ·10	47 ·28	48 ·12	51 ·12	56 ·80	61 ·70	*S*	59 ·43	58 ·15	51 ·03	46 ·70
22	45 ·90	46 ·12	47 ·28	Good Friday.	*S*	56 ·96	61 ·90	62 ·00	59 ·33	58 ·03	50 ·80	46 ·53
23	*S*	46 ·15	47 ·30	48 ·10	51 ·30	56 ·95	61 ·90	62 ·10	59 ·22	*S*	50 ·60	46 ·20
24	45 ·96	46 ·18	47 ·29	*S*	51 ·42	57 ·00	*S*	62 ·15	59 ·20	57 ·57	50 ·40	45 ·97
25	46 ·10	46 ·20	47 ·25	48 ·00	51 ·50	57 ·10	62 ·10	62 ·20	*S*	57 ·30	50 ·23	*S*
26	46 ·05	46 ·20	47 ·25	47 ·90	51 ·60	*S*	62 ·20	62 ·10	58 ·90	56 ·67	50 ·18	[illegible]

(III.)—Reading of a Thermometer whose bulb is sunk to the depth of 6 French feet—*concluded*

Day of the Month, 1859.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
27	46·00	*S*	*S*	47·95	51·75	57·35	62·20	62·15	58·80	56·20	*S*	45·30
28	46·04	46·10	47·32	48·05	51·90	57·40	62·20	*S*	58·90	55·90	50·00	45·20
29	46·10		47·40	48·30	*S*	57·60	62·20	62·48	58·92	55·49	49·90	45·18
30	*S*		47·40	48·21	52·47	57·83	62·30	62·20	58·95	*S*	49·80	45·10
31	46·08		47·50		52·70		*S*	62·18		54·80		45·18
Means.	46·39	45·91	46·86	48·06	50·42	55·82	60·43	62·38	60·25	58·04	52·17	47·49

(IV.)—Reading of a Thermometer whose bulb is sunk to the depth of 3·2 feet (3 French feet) below the surface of the soil, at the same times.

Day of the Month, 1859.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	43·33	43·20	43·40	45·80	*S*	57·08	62·20	67·10	63·50	58·97	50·00	45·08
2	*S*	42·70	43·70	45·18	48·40	57·50	62·30	66·90	62·90	*S*	50·23	44·65
3	43·60	42·78	43·80	*S*	48·50	57·80	*S*	66·67	62·50	59·10	50·40	44·23
4	43·50	42·50	44·20	45·68	48·51	58·20	62·73	66·40	*S*	59·40	50·40	*S*
5	43·15	42·25	44·95	46·35	48·90	*S*	63·05	66·44	62·10	59·50	50·35	43·52
6	43·20	*S*	*S*	47·00	49·11	59·20	63·21	66·19	61·82	59·68	*S*	43·97
7	43·10	42·50	45·92	47·70	49·66	59·40	63·21	*S*	61·70	59·80	50·80	44·27
8	42·87	42·37	46·20	48·50	*S*	59·72	64·03	65·70	61·52	59·96	51·10	44·35
9	*S*	42·20	46·05	49·10	50·73	60·00	64·40	64·64	61·40	*S*	50·70	44·30
10	42·10	42·38	45·50	*S*	50·92	60·30	*S*	65·50	61·40	59·78	50·20	44·12
11	41·70	42·78	45·00	49·45	51·10	60·23	64·96	65·08	*S*	59·60	49·42	*S*
12	41·70	43·00	44·80	48·95	51·20	*S*	65·48	64·82	60·87	59·30	48·80	43·50
13	42·05	*S*	*S*	48·62	51·48	60·28	66·06	64·80	60·50	58·90	*S*	43·10
14	42·28	43·60	45·82	48·22	51·80	60·20	66·60	*S*	60·30	58·70	47·70	42·90
15	42·20	43·68	46·25	47·70	*S*	60·25	66·88	65·10	60·00	58·44	47·03	42·46
16	*S*	43·60	46·34	47·60	52·38	60·30	66·88	65·03	59·60	*S*	46·50	41·90
17	41·68	43·90	46·18	*S*	52·40	60·35	*S*	64·53	59·35	58·30	46·10	41·40
18	41·68	44·35	46·25	46·42	52·40	60·40	67·50	64·30	*S*	58·10	46·00	*S*
19	42·30	44·37	46·22	45·98	52·30	*S*	67·70	64·40	58·92	57·80	45·83	40·60
20	42·78	*S*	*S*	45·70	52·40	60·50	67·74	64·60	58·87	57·60	*S*	40·07
21	42·88	44·00	45·88	45·71	52·60	60·32	67·80	*S*	58·62	57·20	45·43	39·80
22	42·95	44·15	45·90	Good Friday	*S*	60·10	67·50	65·10	58·52	56·40	45·18	39·50
23	*S*	44·30	45·60	46·20	52·60	60·12	67·20	65·10	58·28	*S*	45·07	39·40
24	43·20	44·15	45·60	*S*	52·90	60·40	*S*	65·13	58·38	53·95	45·35	39·30
25	42·80	43·90	45·72	46·60	53·15	60·70	66·70	65·30	*S*	52·80	45·50	*S*
26	43·15	43·70	46·00	46·90	53·70	*S*	66·40	65·40	59·25	51·30	45·60	General Holiday.
27	43·35	*S*	*S*	47·35	54·42	61·50	66·42	65·55	59·30	51·10	*S*	40·50
28	43·30	43·60	46·45	47·65	55·10	62·08	66·80	*S*	59·30	50·77	45·96	40·70
29	43·44		46·70	48·00	*S*	62·40	67·13	65·20	59·29	50·35	45·90	41·00
30	*S*		46·80	48·11	56·10	62·40	67·35	64·70	59·12	*S*	45·62	41·50
31	43·44		46·54		56·50		*S*	64·10		50·00		42·15
Means.	42·76	43·53	45·69	47·22	51·89	60·07	65·72	65·32	60·28	56·80	47·74	42·24

(V.)—Reading of a Thermometer whose bulb is sunk to the depth of 1 inch below the surface of the soil, within the case which covers the tops of the deep-sunk Thermometers, at the same times.

Day of the Month, 1859.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	43 ·5	40 ·8	45 ·5	40 ·5	*S*	63 ·0	65 ·0	68 ·4	60 ·0	61 ·8	51 ·0	[illegible]
2	*S*	42 ·2	46 ·8	46 ·0	50 ·0	64 ·5	65 ·0	68 ·5	60 ·8	*S*	49 ·5	39 ·7
3	34 ·0	39 ·0	48 ·0	*S*	55 ·5	64 ·5	*S*	68 ·7	61 ·7	63 ·0	48 ·5	37 ·0
4	41 ·7	40 ·8	52 ·7	52 ·0	51 ·4	66 ·0	68 ·0	68 ·8	*S*	64 ·7	49 ·5	*S*
5	42 ·3	43 ·4	52 ·0	53 ·0	52 ·0	*S*	67 ·0	67 ·0	60 ·8	62 ·0	49 ·7	48 ·8
6	39 ·0	*S*	*S*	56 ·0	52 ·0	65 ·0	69 ·7	65 ·8	63 ·8	62 ·5	*S*	44 ·0
7	38 ·0	41 ·0	50 ·6	59 ·0	56 ·0	65 ·0	71 ·0	*S*	61 ·2	63 ·0	53 ·0	44 ·0
8	37 ·0	40 ·0	45 ·0	56 ·0	*S*	66 ·5	71 ·0	69 ·5	64 ·0	62 ·0	49 ·5	43 ·7
9	*S*	44 ·0	43 ·1	53 ·5	55 ·0	66 ·0	70 ·5	65 ·2	64 ·0	*S*	44 ·5	41 ·0
10	38 ·0	45 ·0	42 ·7	*S*	52 ·6	63 ·0	*S*	63 ·0	58 ·8	59 ·7	41 ·5	40 ·0
11	49 ·0	45 ·0	46 ·0	52 ·0	53 ·0	63 ·6	73 ·0	65 ·0	*S*	57 ·7	43 ·0	*S*
12	48 ·0	47 ·0	51 ·0	47 ·5	54 ·5	*S*	75 ·0	67 ·0	59 ·0	57 ·0	42 ·7	37 ·0
13	43 ·0	*S*	*S*	45 ·5	57 ·0	64 ·0	76 ·2	68 ·7	58 ·0	57 ·0	*S*	39 ·0
14	38 ·0	46 ·0	51 ·8	46 ·5	56 ·0	62 ·0	72 ·4	*S*	56 ·0	58 ·0	38 ·7	35 ·0
15	38 ·0	43 ·5	47 ·8	49 ·5	*S*	63 ·0	71 ·8	65 ·0	58 ·0	58 ·0	38 ·0	33 ·8
16	*S*	48 ·0	48 ·0	42 ·8	55 ·0	63 ·7	73 ·0	63 ·5	58 ·0	*S*	40 ·0	32 ·0
17	43 ·0	48 ·0	48 ·5	*S*	54 ·0	62 ·0	*S*	63 ·8	58 ·7	58 ·5	42 ·0	31 ·0
18	47 ·8	44 ·6	46 ·5	43 ·0	54 ·0	63 ·0	75 ·4	67 ·0	*S*	56 ·0	41 ·7	*S*
19	46 ·0	42 ·0	45 ·4	43 ·5	55 ·7	*S*	73 ·0	69 ·0	58 ·5	56 ·0	43 ·0	31 ·0
20	43 ·0	*S*	*S*	45 ·5	55 ·0	64 ·2	69 ·8	69 ·0	56 ·5	54 ·8	*S*	32 ·0
21	44 ·0	46 ·0	46 ·5	47 ·0	55 ·0	60 ·0	70 ·0	*S*	57 ·5	48 ·0	40 ·0	38 ·0
22	46 ·5	46 ·2	43 ·0	Good Friday.	*S*	65 ·5	70 ·0	66 ·0	56 ·0	44 ·5	40 ·0	36 ·0
23	*S*	43 ·0	46 ·0	47 ·0	54 ·0	63 ·7	68 ·0	68 ·0	59 ·0	*S*	43 ·0	36 ·0
24	40 ·5	42 ·0	48 ·0	*S*	58 ·0	62 ·7	*S*	70 ·0	64 ·3	40 ·8	45 ·0	41 ·0
25	46 ·0	42 ·0	49 ·0	51 ·0	59 8	65 ·0	66 ·0	72 ·0	*S*	42 ·0	43 ·7	*S*
26	43 ·0	43 ·0	48 ·8	52 ·8	61 ·2	*S*	70 ·5	70 ·3	61 ·8	47 ·0	45 ·7	General Holiday.
27	45 ·0	*S*	*S*	49 ·5	61 ·0	71 ·0	71 ·5	67 ·3	59 ·0	43 ·0	*S*	40 ·0
28	44 ·0	42 ·5	50 ·0	49 ·8	61 ·0	68 ·0	73 ·0	*S*	60 ·1	45 ·0	45 ·0	44 ·0
29	43 ·5		50 ·0	54 ·8	*S*	64 ·5	72 ·5	65 ·0	59 ·0	46 ·3	43 ·0	44 ·8
30	*S*		45 ·0	49 ·5	64 ·0	65 ·5	70 ·3	61 ·5	58 ·8	*S*	41 ·5	46 ·0
31	40 ·5		40 ·0		63 ·0		*S*	59 ·0		47 ·0		47 ·0
Means.	42 ·4	43 ·5	47 ·3	49 ·3	55 ·8	64 ·4	70 ·7	66 ·7	59 ·7	54 ·4	44 ·3	39 ·3

(VI.)—Reading of a Thermometer within the case covering the deep-sunk Thermometers, whose bulb is placed on a level with their scales, at the same times.

Day of the Month. 1859.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	43 ·7	43 ·0	52 ·0	44 ·8	*S*	71 ·0	67 ·2	72 ·8	63 ·0	66 ·0	55 ·5	38 ·8
2	*S*	45 ·1	53 ·0	50 ·5	52 ·4	70 ·0	69 ·0	73 ·0	64 ·7	*S*	52 ·0	36 ·0
3	34 ·5	39 ·2	56 ·2	*S*	55 ·8	70 ·0	*S*	76 ·9	63 ·0	69 ·8	53 ·7	35 ·0
4	42 ·2	45 ·0	60 ·8	63 ·0	60 ·4	74 ·0	73 ·0	71 ·8	*S*	76 ·0	51 ·0	*S*
5	42 ·8	48 ·0	59 ·8	64 ·0	59 ·0	*S*	79 ·4	71 ·7	68 ·0	69 ·0	53 ·5	53 ·7
6	36 ·7	*S*	*S*	72 ·5	61 ·8	71 ·0	79 ·5	68 ·8	68 ·0	68 ·0	*S*	47 ·5
7	37 ·8	44 ·0	54 ·0	74 ·8	69 ·0	69 ·0	81 ·3	*S*	65 ·0	66 ·3	53 ·7	47 ·0
8	36 ·0	43 ·0	43 ·8	57 ·5	*S*	76 ·0	79 ·2	74 ·0	70 ·0	63 ·0	51 ·0	44 ·0
9	*S*	46 ·5	45 ·0	56 ·0	63 ·7	72 ·0	80 ·0	63 ·0	64 ·8	*S*	44 ·5	41 ·0
10	37 ·6	47 ·5	49 ·9	*S*	52 ·8	66 ·5	*S*	62 ·0	62 ·0	59 ·0	40 ·0	40 ·5
11	48 ·0	48 ·8	54 ·7	55 ·0	60 ·0	67 ·8	83 ·2	71 ·2	*S*	56 ·0	47 ·5	*S*
12	47 ·7	49 ·8	55 ·0	49 ·8	61 ·7	*S*	88 ·7	76 ·0	68 ·5	60 ·5	47 ·0	33 ·8
13	43 ·8	*S*	*S*	43 ·8	63 ·0	70 ·0	88 ·0	77 ·7	60 ·6	58 ·3	*S*	37 ·0
14	36 ·0	49 ·0	53 ·0	53 ·0	64 ·0	66 ·5	80 ·0	*S*	56 ·0	63 ·7	39 ·5	30 ·3
15	43 ·5	46 ·0	48 ·0	41 ·8	*S*	70 ·8	80 ·8	63 ·0	63 ·0	60 ·0	35 ·5	31 ·0

(VI.)—Reading of a Thermometer within the case covering the deep-sunk Thermometers—*concluded.*

Day of the Month, 1859.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
16	*S*	53·0	53·8	40·3	60·0	68·0	81·0	69·0	64·0	*S*	43·5	27·0
17	47·5	52·2	51·8	*S*	53·2	66·0	*S*	66·2	62·0	61·0	42·5	25·0
18	52·0	45·0	50·0	42·8	55·0	71·0	88·0	73·0	*S*	55·0	46·0	*S*
19	48·0	43·0	51·9	51·0	60·0	*S*	77·0	77·5	63·7	57·0	47·7	27·0
20	48·5	*S*	*S*	53·0	56·5	67·4	72·0	80·5	63·0	56·0	*S*	33·6
21	45·5	53·0	46·5	51·8	57·2	65·0	74·0	*S*	59·0	45·0	47·0	43·0
22	48·0	60·0	45·2	Good Friday.	*S*	75·2	77·2	73·8	62·0	46·0	43·0	38·0
23	*S*	47·0	49·0	52·5	62·5	67·0	67·0	78·0	65·0	*S*	44·0	37·0
24	43·0	48·0	51·5	*S*	69·0	67·0	*S*	82·0	74·0	38·0	50·7	45·0
25	51·0	49·0	54·8	53·0	69·5	74·5	71·0	87·5	*S*	43·7	42·0	*S*
26	44·0	47·5	51·0	63·0	72·0	*S*	79·3	74·0	65·0	46·3	51·0	General Holiday.
27	48·5	*S*	*S*	50·0	71·0	79·0	77·7	72·5	58·8	41·0	*S*	44·7
28	47·0	50·7	52·0	52·0	67·0	70·5	80·0	*S*	63·6	50·0	43·6	45·0
29	47·0		53·5	61·7	*S*	69·0	76·0	71·0	65·0	46·5	43·7	49·0
30	*S*		40·0	48·8	73·0	73·0	74·0	62·0	60·2	*S*	39·0	51·0
31	41·0		40·2		72·0		*S*	60·7		48·0		52·8
Means.	43·9	47·2	51·0	53·9	62·4	70·3	77·6	74·2	63·9	56·5	46·5	39·8

WEEKLY MEANS OF READINGS OF THERMOMETERS.

1859. Period.			Thermometers sunk in the ground.					Thermometer inclosed in the box which covers the scales of the deep-sunk Thermometers, and placed on a level with their scales.
			Bulb 24 French Feet deep.	Bulb 12 French Feet deep.	Bulb 6 French Feet deep.	Bulb 3 French Feet deep.	Bulb 1 Inch deep.	
	d	d	°	°	°	°	°	°
January	1 to	7	51·95	49·97	47·17	43·31	39·8	39·6
	8 to	14	51·81	49·57	46·52	42·12	42·2	41·5
	15 to	21	51·68	49·12	45·98	42·25	43·6	47·5
	22 to	28	51·52	48·68	46·01	43·13	44·2	46·9
	29 to February	4	51·33	48·30	46·03	43·01	41·1	43·4
February	5 to	11	51·16	48·06	45·73	42·41	43·1	46·3
	12 to	18	51·00	47·81	45·75	43·69	46·2	49·2
	19 to	25	50·82	47·60	46·12	44·15	43·5	48·3
	26 to March	4	50·66	47·51	46·09	43·73	46·4	53·4
March	5 to	11	50·47	47·38	46·53	45·60	46·6	51·2
	12 to	18	50·32	47·39	46·91	45·94	48·9	51·9
	19 to	25	50·15	47·44	47·27	45·82	46·3	49·8
	26 to April	1	49·97	47·49	47·41	46·38	45·7	46·9
April	2 to	8	49·92	47·60	47·50	46·74	53·7	63·7
	9 to	15	49·73	47·52	48·38	48·67	49·1	49·9
	16 to	22	49·62	47·70	48·42	46·28	44·4	47·8
	23 to	29	49·56	47·87	48·05	47·12	50·8	55·4
	30 to May	6	49·50	47·90	48·63	48·59	50·9	56·4
May	7 to	13	49·47	48·15	49·59	50·85	54·7	61·7
	14 to	20	49·41	48·38	50·69	52·28	55·0	58·1
	21 to	27	49·39	48·81	51·45	53·23	58·2	66·9
	28 to June	3	49·37	49·24	52·78	56·68	63·3	70·5
June	4 to	10	49·37	49·79	54·58	59·47	65·3	71·4
	11 to	17	49·37	50·51	56·03	60·27	63·1	68·2
	18 to	24	49·42	51·30	56·82	60·31	63·2	68·8
	25 to July	1	49·50	52·00	57·54	61·88	66·5	72·2
July	2 to	8	49·58	52·60	58·55	63·15	68·6	76·1
	9 to	15	49·71	53·29	59·79	65·73	73·2	83·3
	16 to	22	49·89	54·03	61·36	67·52	71·9	78·2
	23 to	29	50·07	54·83	62·13	66·78	70·3	75·2
	30 to August	5	50·23	55·49	62·65	66·81	68·6	73·4
August	6 to	12	50·42	56·05	62·62	65·32	65·9	69·2
	13 to	19	50·68	56·52	62·21	64·69	66·2	71·1
	20 to	26	50·95	56·81	62·11	65·11	69·2	79·3
	27 to September	2	51·15	56·90	62·19	64·33	62·3	65·7
September	3 to	9	51·40	57·16	61·40	61·84	62·6	66·5
	10 to	16	51·61	57·18	60·49	60·45	58·0	62·3
	17 to	23	51·87	57·10	59·56	58·76	57·7	62·5
	24 to	30	52·07	56·88	58·95	59·11	60·5	64·4
October	1 to	7	52·28	56·77	58·86	59·41	62·8	69·2
	8 to	14	52·42	56·60	58·89	59·37	58·6	60·1
	15 to	21	52·59	56·54	58·46	57·91	55·2	55·7
	22 to	28	52·66	56·34	56·95	52·72	43·7	44·2
	29 to November	4	52·82	56·03	54·55	50·23	48·6	51·1
November	5 to	11	52·94	55·33	53·40	50·43	46·9	48·4
	12 to	18	52·98	54·66	52·43	47·02	40·5	42·3
	19 to	25	52·98	54·02	50·76	45·39	42·5	45·7
	26 to December	2	52·93	53·23	49·84	45·47	42·3	42·0
December	3 to	9	52·88	52·47	48·81	44·11	43·1	44·7
	10 to	16	52·81	51·72	48·13	43·00	36·1	33·3
	17 to	23	52·71	51·08	46·84	40·13	34·0	33·9
	24 to	31	52·61	50·15	45·32	40·86	43·8	47·9

ABSTRACT OF THE CHANGES OF THE DIRECTION OF THE WIND, AS DERIVED FROM OSLER'S ANEMOMETER.

By *direct* motion, in the following statements, is meant that the change of the direction of the wind was in the order N., E., S., W., N., &c. by *retrograde* is meant in the order N., W., S., E., N., &c.

1858. Dec. $31^{d}.\ 12^{h}$. The direction of the wind was S.
1859. Jan. 31. 12. ,, ,, S.S.W., which implies a direct motion of 22½°.
On Jan. 8. 22, the trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360°.
Therefore the whole excess of direct motion in the month of January was 382½°.

1859. Jan. $31^{d}.\ 12^{h}$. The direction of the wind was S.S.W.
Feb. 28. 12. ,, ,, S.W., which implies a direct motion of 22½°.
Therefore the whole excess of direct motion in the month of February was 22½°.

1859. Feb. $28^{d}.\ 12^{h}$. The direction of the wind was S.W.
March 31. 12. ,, ,, N., which implies a direct motion of 135°.
On March 9. 22, the trace was shifted to the next set of lines downwards, which implies apparent direct motion of 360°.
Therefore the whole excess of direct motion in the month of March was 495°.

1859. March $31^{d}.\ 12^{h}$. The direction of the wind was N.
April 30. 12. ,, ,, E.N.E., which implies a retrograde motion of 292½°.
On April 13. 22, $24^{d}.\ 22^{h}$, $29^{d}.\ 22^{h}$, the trace was shifted to the next set of lines downwards; on April $12^{d}.\ 22^{h}$, the trace was shifted to the next set of lines upwards, implying direct motion of 1080°, and retrograde motion of 360°.
Therefore the whole excess of direct motion in the month of April was 427½°.

1859. April $30^{d}.\ 12^{h}$. The direction of the wind was E.N.E.
May 31. 12. ,, ,, S., which implies a direct motion of 472½°.
On May 5. 22, $13^{d}.\ 22^{h}$, $19^{d}.\ 22^{h}$, the trace was shifted to the next set of lines downwards; on May $4^{d}.\ 22^{h}$, the trace was shifted to the next set of lines upwards, implying direct motion of 1080°, and retrograde motion of 360°.
Therefore the whole excess of direct motion in the month of May was 1192½°.

1859. May $31^{d}.\ 12^{h}$. The direction of the wind was S.
June 30. 12. ,, ,, N., which implies a retrograde motion of 180°.
On June 0. 22, $11^{d}.\ 22^{h}$, $14^{d}.\ 22^{h}$, $16^{d}.\ 22^{h}$, $17^{d}.\ 22^{h}$, $28^{d}.\ 22^{h}$, the trace was shifted to the next set of lines downwards; on June $8^{d}.\ 22^{h}$, $12^{d}.\ 9^{h}$, the trace was shifted to the next set of lines upwards, implying direct motion of 2160°, and retrograde motion of 720°.
Therefore the whole excess of direct motion in the month of June was 1260°.

1859. June $30^{d}.\ 12^{h}$. The direction of the wind was N.
July 31. 12. ,, ,, S.W., which implies a retrograde motion of 135°.
On July 10. 22, $14^{d}.\ 22^{h}$, $21^{d}.\ 22^{h}$, $30^{d}.\ 22^{h}$, the trace was shifted to the next set of lines downwards, implying direct motion of 1440°.
Therefore the whole excess of direct motion in the month of July was 1305°.

1859. July $31^{d}.\ 12^{h}$. The direction of the wind was S.W.
Aug. 31. 12. ,, ,, W.S.W., which implies a direct motion of 22½°.
On Aug. 11. 22, $28^{d}.\ 22^{h}$, the trace was shifted to the second set of lines downwards; on Aug. $8^{d}.\ 22^{h}$, $20^{d}.\ 22^{h}$, the trace was shifted to the next set of lines upwards; implying direct motion of 720°, and retrograde motion of 720°.
Therefore the whole excess of direct motion in the month of August was 22½°.

1859. Aug. $31^{\text{d}}.\ 12^{\text{h}}.$ The direction of the wind was W.S.W.
Sept. 30. 12. ,, ,, S., which implies a retrograde motion of 67½°.
On Sept. 5. 22, $27^{\text{d}}.\ 22^{\text{h}}$, the trace was shifted to the next set of lines downwards; on Sept. $13^{\text{d}}.\ 22^{\text{h}}$, the trace was shifted to the next set of lines upwards, implying direct motion of 720°, and retrograde motion of 360°.
Therefore the whole excess of direct motion in the month of September was 292½°.

1859. Sept. $30^{\text{d}}.\ 12^{\text{h}}.$ The direction of the wind was S.
Oct. 31. 12. ,, ,, W.S.W., which implies a direct motion of 67½°.
On Oct. 6. 22, $31^{\text{d}}.\ 2^{\text{h}}$, the trace was shifted to the next set of lines downwards; on Oct. $9^{\text{d}}.\ 1^{\text{h}}$, $23^{\text{d}}.\ 22^{\text{h}}$, the trace was shifted to the next set of lines upwards, implying direct motion of 720°, and retrograde motion of 720°.
Therefore the whole excess of direct motion in the month of October was 67½°.

1859. Oct. $31^{\text{d}}.\ 12^{\text{h}}.$ The direction of the wind was W.S.W.
Nov. 30. 12. ,, ,, N.N.W., which implies a direct motion of 90°.
On Nov. 14. 22, $17^{\text{d}}.\ 22^{\text{h}}$, the trace was shifted to the next set of lines downwards; on Nov. $29^{\text{d}}.\ 22^{\text{h}}$, the trace was shifted to the next set of lines upwards; implying direct motion of 720°, and retrograde motion of 360°.
Therefore the whole excess of direct motion in the month of November was 450°.

1859. Nov. $30^{\text{d}}.\ 12^{\text{h}}.$ The direction of the wind was N.N.W.
Dec. 31. 12. ,, ,, S.W., which implies a retrograde motion of 112½°.
On Dec. 11. 22, $14^{\text{d}}.\ 22^{\text{h}}$, $24^{\text{d}}.\ 22^{\text{h}}$. $25^{\text{d}}, 22^{\text{h}}$, the trace was shifted to the next set of lines upwards; on Dec. $12^{\text{d}}.\ 22^{\text{h}}$, $16^{\text{d}}.\ 22^{\text{h}}$, the trace was shifted to the next set of lines downwards; implying retrograde motion of 1440°, and direct motion of 720°.
Therefore the whole excess of retrograde motion in the month of December was 832½°.

The whole excess of direct motion to the end of the year was 5085°.

The revolution-counter which is attached to the vertical spindle of the vane, whose readings increase with change of direction of the wind in the order N., E., S., W., &c., or in direct motion, and decrease with change of direction in the order N., W., S., E., &c., or in retrograde motion, gave the following readings :—

	revs
On 1859, January 1	27·8
December 31	41·9

Implying an excess of direct motion, during the year, of 14·1 revolutions, or 5076°.

AMOUNT OF RAIN COLLECTED IN EACH MONTH OF THE YEAR 1859.

1859. MONTH.	Monthly Amount of Rain collected in each Gauge.			
	Osler's Anemometer Gauge.	On the Roof of the Library.	Crosley's.	Cylinder partly sunk in the Ground.
	in.	in.	in.	in.
January - -	0 ·2	0 ·6	0 ·8	0 ·8
February - -	0 ·4	0 ·5	0 ·8	0 ·9
March - -	0 ·5	1 ·1	1 ·4	1 ·4
April - -	1 ·4	1 ·7	2 ·0	2 ·2
May - - -	2 ·0	2 ·5	2 ·1	2 ·3
June - - -	1 ·1	1 ·3	1 ·4	1 ·4
July - - -	2 ·6	3 ·0	3 ·1	3 ·3
August - -	0 ·7	0 ·8	1 ·1	1 ·1
September - -	2 ·8	2 ·9	3 ·7	3 ·8
October - -	2 ·9	3 ·0	3 ·1	3 ·6
November - -	1 ·7	—	2 ·5	2 ·9
December - -	1 ·0	—	1 ·8	2 ·2
Sums - -	17 ·3	—	23 ·8	25 ·9

The Gauge on the Library was away for repair during the months of November and December.

During the months of April and May, Crosley's Gauge failed to register correctly; the numbers which are inserted for those months have been inferred from the readings given by the Cylinder Gauge.

The heights of the receiving surfaces are as follows:

	Above the Mean Level of the Sea.			Above the Ground.	
	Ft.	In.		Ft.	In.
Osler's Anemometer Gauge	205	6	....	50	8
Gauge on the Roof of the Library	177	2	....	22	4
Crosley's Gauge	156	6	....	1	8
Cylinder Gauge	155	3	....	0	5

ROYAL OBSERVATORY, GREENWICH.

REDUCTION

WITH REFERENCE TO THE POSITIONS OF THE SUN AND MOON

OF

THE MAGNETIC OBSERVATIONS

FROM **1848** TO **1857**

(EXCLUDING THE DAYS OF GREAT MAGNETIC DISTURBANCE).

REDUCTION

OF

THE MAGNETIC OBSERVATIONS

FROM 1848 TO 1857.

METHODS OF INTERPRETING THE PHOTOGRAPHIC REGISTERS.

THE Magnetic Registers, upon which the following Reductions are founded, are entirely those given by photographic self-registration. For the description of the photographic self-registering apparatus, and the method of determining the zeros of measure and time, I refer to the Volume of Greenwich Magnetical and Meteorological Observations, 1847, Addendum to the Introduction.

The first necessary step was, to decide on the rejection of those photographic traces, made in times of great magnetic disturbance, which seem to defy ordinary treatment. The following is a list of the days rejected for this reason :—

For the Declination-Magnetometer.

1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.
Jan. 16 28 Feb. 20 21 24 Mar. 17 20 April 7 Oct. 18 23 29 Nov. 17 Dec. 17	Oct. 30	Feb. 23 June 13 Oct. 1 2	Jan. 16 19 Feb. 18 Sept. 3 4 6 7 29 Oct. 2 28 Dec. 6 28 29	Jan. 4 19 Feb. 14 15 17 18 19 20 21 April 20 May 19 20 June 11 July 10 Nov. 11 13	Jan. 10 Mar. 7 8 May 2 3 24 June 22 July 12 Sept. 1 2 Oct. 25 Nov. 9 Dec. 6 21	Jan. 20 Feb. 16 24 25 Mar. 6 15 16 28 April 10	Mar. 12 April 4		Feb. 26 Mar. 13 May 7 10 Sept. 3 Nov. 12 16 17 Dec. 16 17

The following days, also, might probably have been rejected :

1848, Feb. 22, 23, May 18, July 11, Nov. 18 ; 1849, Nov. 27 ; 1850, Feb. 22, Mar. 31, June 13 ; 1852, June 16; 1854, Jan. 8, April 23, May 25 ; 1855, Oct. 18.

For the Horizontal-Force-Magnetometer.

1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.
Jan. 16 28 Feb. 20 21 22 23 24 Mar. 17 20 April 7 May 18 July 11 Oct. 18 23 25 Nov. 17 18	Nov. 27	Feb. 22 23 Mar. 31 May 7 June 13 Oct. 1 2	Jan. 16 19 Feb. 18 Sept. 3 4 6 7 29 Oct. 2 28 Dec. 6	Jan. 4 19 Feb. 14 15 17 18 19 20 21 April 20 May 19 20 June 11 16 July 10 Nov. 11	Jan. 10 Mar. 7 8 May 2 3 24 June 22 July 12 Sept. 1 2 Oct. 25 Nov. 9 Dec. 6 21	Jan. 8 Feb. 16 24 25 March 15 16 28 April 10 23 May 25	Mar. 12 April 4 July 19 Oct. 18		Feb. 26 May 7 10 Sept. 3 Nov. 12 17 Dec. 16 17

The following days might probably have been rejected :

1848, Dec. 17 ; 1849, Oct. 30 ; 1851, Dec. 28, 29 ; 1852, Nov. 13 ; 1853, March 11, Aug. 21, Oct. 1, 2 ; 1854, Jan. 20, Mar. 6 ; 1857, Nov. 16.

Besides these, which are omitted merely on account of the evident magnetical disturbance, numerous days are omitted on account of defect of adjustment, loss of photographic trace, &c., on some of which there may have been magnetical disturbance.

For the Vertical Force, the traces of magnetical disturbance are rarely conspicuous ; the omission arises usually from instrumental or photographic imperfection.

The next process was, to draw by hand a curve passing, as well as could be judged, through the mean of proximate points of each photographic curve, without taking all its rapid inequalities. The general rule was, to suppress entirely all the irregularities whose period from maximum to minimum amounted to only a few minutes of time, but to respect entirely the curvatures whose period was as great as two or three hours ; the curvatures whose period had an intermediate value being treated with an intermediate degree of respect. The numerical measures which are subsequently used are in all cases the ordinates of the hand-curve thus traced.

Sheets, properly printed and ruled, were prepared for the entry of the measures of the ordinates. The days of the month, or days of the lunation (as the case might be), followed in vertical columns : the homonymous hours of each day, solar or lunar (as the case might be), being arranged on the same horizontal line. One computer, holding a scale graduated to minutes of arc, or to fractional parts of the horizontal or vertical force, read off the measures of the ordinates ; while another computer entered the measures in the sheets.

The means were then to be taken, with reference to days and with reference to hours ; and it became important to decide on the course to be adopted in instances where the record was imperfect. It was certain, however, that the change of Declination from hour to hour is greater than that from day to day, and it seemed likely that the same law would apply to Horizontal Force and Vertical Force. This consideration determined the rule ; that no mean should be taken for a day, unless the series of 24 readings were complete : but that the means of the successive hours should in all instances be taken.

This, which is common to all, being premised, I have now to explain the further processes adopted for each section of the work.

I. REDUCTIONS REFERRED TO THE SUN'S PLACE.

1. OBSERVATIONS OF MAGNETIC WESTERN DECLINATION, REFERRED TO THE SUN'S PLACE.

It will be seen, in the description of the Photographic Apparatus and Methods (Greenwich Magnetical and Meteorological Observations, 1847, Addendum to Introduction) that each photographic sheet is furnished with a scale of time, whose zeros have been determined by comparison of arbitrary interruptions of the beam of light with the clock-times of making the interruptions as recorded by the observer. The clock was adjusted to Göttingen mean solar time; and the time-scales therefore represent Göttingen mean solar time: and the measures of ordinates, made at every hour of the scale, therefore, give the magnetic declination for every hour of Göttingen mean solar time, or for an instant preceding every hour of Greenwich mean solar time by 40^m of time nearly.

The zeros of measure of declination were determined by comparing the measures of the photographic ordinates at certain times with the declinations observed by theodolite at the same times, and the photographic measures are therefore liable to the same errors as eye-observations. The following occurrences in the adjustment of the declination-magnet must therefore be taken into account, as affecting the photographic ordinates.

The magnet is suspended by a skein of silk, through the intermediation of an adjustible circle, called the "torsion-circle." The circle ought to be so adjusted that, in ordinary positions of the magnet, the tension of the suspending skein exerts no appreciable force disturbing the position of the magnet. This adjustment is ascertained by inserting, in the plane of the magnet, a brass bar, and remarking whether it takes spontaneously a position corresponding nearly with that of the magnet. If there is sensible discordance, it shows that the magnet has been subject to an angular strain, turning it from its proper position by a certain multiple of that discordance. The multiple has been found by experiment to be $\frac{1}{99}$ nearly.

The examination above described is made at the end of every year, and at other times when it appears necessary.

On 1848, March 5, the suspension-skein broke. A new skein was mounted, but it gave great trouble for a time. The trial of the brass bar was made at first every day; afterwards, less frequently. After the adjustments and trials at the end of the year 1848, the torsion-circle was left at the reading 252°.30′.

On 1849, February 4, 21^h, the trial of the brass bar showed that the torsion-circle ought to have been at the reading 271°.20′. The course of the declination-readings appears to show clearly that this error of 18°.50′ had existed from the beginning of the observations in 1849, January. In consequence of this error of adjustment, every value of Western Declination, from 1849, January 1 to February 4, printed in the "Indications of Magnetometers," in the Greenwich Observations, 1849, is too small by 11′·3 nearly. (In Table I. below, the results of observations are printed without this correction; but in subsequent Tables the correction is applied.)

On 1849, August 22, it was found necessary to change the reading of torsion-circle to 256°.0′. It seems probable that the change in the suspension-skein had come on gradually. No alteration is made in the values of declination printed below.

During the year 1850, the reading was steady and near to 251°.

In 1851, the reading was about 256° to October 19, when the leather strap, to which the skein is attached, broke, without other injury to the skein. The reading then became 268°.

In 1852, although the strap broke on August 21, the reading was constantly near 270°; and this continued through 1853 and 1854.

In 1855 and 1856, the reading was constantly near 252°, although, by the breaking of a tooth of the locking-wheel of the strap, the magnet was dropped a little way on 1856, May 21.

Through 1857, the reading was steady at 266° nearly.

On 1849, October 1 and 2, it seems possible that the magnet was not perfectly free. In 1850, there is ground for suspecting the observations from September 4 to October 7; on October 7, at about 4^h, the declination diminished suddenly by 12′, as if the magnet had been freed from some restraint. In the reductions which follow, no notice has been taken of this circumstance. In 1852, May 5 to 11, the declinations printed in the "Indications of Magnetometers," in the Greenwich Observations, 1852, ought to be increased by 10′; a clerical error of 10′ having been committed in entering the value of the base-line on the photographic sheets.

I now proceed with the Printed Tables of this Section.

Table I. contains the Mean Westerly Declination of the Magnet, as derived from the mean of 24 hourly measures on each Astronomical Day. On many of the days omitted, the number of measures is not far deficient from 24; but it has been thought best to adhere rigorously to the simple rule stated above. The records from 1849, January 3 to February 3, which appear to require the correction + 11′·3, are printed in smaller type than the others.

Table II. gives the Mean Westerly Declination in each month, the numbers being the simple means, for each month, of the numbers in Table I. The continued secular diminution of Westerly Declination, from month to month, is shown generally in every year, but more clearly in the column of "Mean of Years."

On comparing the mean of the three first annual means with the mean of the three last, it appears that the annual diminution is 7'·9. The proportional parts of this, for the separate months, being applied with sign changed to the numbers of "Mean of Years," form the "Mean corrected for Secular Change." If the secular change were perfectly uniform, and the observations complete and free from error, these numbers would be equal. But besides small irregularities in January and December (arising from the loss of a few days at the beginning of January and the end of December), there is most clearly an increase of Westerly Declination in the summer months. This will be a subject of further remark.

Table III. gives the Monthly Means of the actual diurnal range of the magnet in the hourly measures, or the mean of the differences between the greatest and least measures on each day, at whatever hours they may occur. The actual ranges in observation would be greater than these, because they would be obained from the salient points of the photographic curve.

Table IV. gives the Mean Monthly Determination of the Western Declination at every hour of the day, showing the diurnal course of declination.

By comparing, for each month, the number in Table II. (which is for the mean of hours) with the numbers in Table IV. for each hour of the day, a Monthly Table of Diurnal Inequality was formed. This table is not printed here; but from it the two following Tables are derived.

To form Table V., the corresponding numbers of the last-mentioned Table, for each month and each hour in the different years, were collected, and their means taken separately for each month. It exhibits the varying character of Diurnal Inequality through the months of the year. The hours refer to Göttingen Mean Solar Time.

To form Table VI., the corresponding numbers of the same table, for the different months of each year, were collected, and their means taken separately for each year. It exhibits the Mean Diurnal Inequality in each year, and the varying character of Diurnal Inequality from year to year. The Mean Diurnal Inequality for all the years is also exhibited. The double diurnal fluctuation is clearly shown. The hours are still those of Göttingen Mean Solar Time.

As a westerly deviation through the angle θ implies that a westerly force has been impressed on the North End of the magnet (and an equal easterly force on the South End) represented by Horizontal Force × sin θ, the numerical value of "sine of deviation" is given in the last column as representing the westerly force in terms of Horizontal Force.

2. Observations of Magnetic Horizontal Force referred to the Sun's Place.

The time used in interpreting the measures of the photographic ordinates of the Bifilar Magnet Curve is Göttingen Mean Solar Time. The zeros of measure of horizontal force were determined by comparing the measures of the photographic ordinates at certain times with the results of eye-observation at the same times; and the zero tacitly adopted for the photographic ordinates is therefore the same as that for the eye-observation. Now the zero for eye-observations is arbitrary (depending on the length of scale, &c.); and the only circumstance which determines the real or natural zero is, that the evaluation of the divisions of the scale has been made by a process which implies that the fluctuations of horizontal force are fluctuations about the magnitude 1·0000. It is therefore necessary to conceive such a constant to be added to the numbers derived from the photographic measures as will make their magnitude nearly 1·0000 ± fluctuations.

The magnet is suspended by the two branches of a skein of silk, forming practically two suspending cords, through the intermediation of a torsion-circle. The state of this circle is examined at the end of every year, and thus the results of one year are absolutely divided (by reason of the change of adjustments) from the results of another year. But, as a general rule, the state of adjustments through each year is unaltered. On 1848, June 29, the strap, to which the suspending skein is attached, broke, and this is the only instance of interruption of adjustments in the course of a year.

On two occasions, however, in consequence of the spot of light passing beyond the limit of the sheet of photographic paper, the adjustments were so altered by hand that a record of the change made could be preserved. The first was on 1853, April 14, when the value of the reading was increased by 0·0085; and the second, on 1853, August 22, when the value was again increased by 0·0110. To harmonize and to bring into one series all the results of the year, the correction +0·0085 has been applied to all results from the beginning of the year to April 13, and −0·0110 to all results from August 22 to the end of the year.

The next point to be arranged was the Correction for Temperature. The coefficients of thermometer-reading were investigated by a process described in the Greenwich Magnetical and Meteorological Observations for 1847, Introduction, page xxxiv; and their values are given in each of the volumes of "Greenwich Magnetical and Meteorological

Observations," and in each of the "Results of Magnetical and Meteorological Observations" following that year. It was only necessary therefore to determine the temperatures. Now the thermometers within the boxes of the magnets were read, in ordinary routine, at the hours 1, 3, 9, 21, of Greenwich Mean Solar Time ; but on Sundays, or other days of irregularity, they were sometimes read at other hours. There were therefore sufficient means for estimating the temperature at any hour with considerable precision, provided that means of interpolating the temperature between these hours of observation, and especially through the long interval from 9^h to 21^h, could be supplied. The system of closing the rooms, of lighting the fires, and of personal attendance, has been so perfectly uniform during the whole period, that the experience of a single year would be ample for this purpose.

As soon as the necessity for this became evident, observations of the temperature were made at every hour of the day on one day in each week for many months. The observer, however, had a fire lighted in the anteroom during the night, and the temperatures of the magnets were thereby raised. The whole of these observations were therefore rejected.

At last it was remarked that during the year 1848 the magnet-thermometers were read at the hours 0, 3, 6, 12, 18, 21, with sufficient frequency to give good information on the slow changes of the thermometers during the longer intervals ; and upon these was founded the following method of correction.

Each month was treated separately. Thus on the observations of January 1848 was founded the system of corrections for the month of January in each of the years 1848, 1849, 1850, &c. to 1857 ; and so for other months.

A graphical projection was prepared, in which the abscissæ represented hours of the day, and the ordinates represented the mean of readings for January 1848 at the hour 0, at the hour 3, at the hour 6, and so for 12, 18, 21. The same was done for February, for March, &c. Through or nearly through the summits of these ordinates for each month, a curve for that month was drawn by hand. These curves presented no doubt or difficulty whatever.

From each of these curves temperatures were read for every hour. The mean of these 24 readings of the January curve was used as the mean temperature of a mean day of January 1848 (confining ourselves, for clearness, to that month).

Then two different processes were used for correcting the mean of observations collected on the sheets ; (1) for the mean of all the observations on one day in January of any year, (2) for the mean of all the observations at one hour through all the days of January in any year.

(1.) For any day of January, the mean of all the thermometer-readings at whatever hours on that day was taken. To find the correction proper to change this into the mean of the 24 readings at the 24 hours, the mean for the same hours in 1848 January, as taken from the curve, was subtracted from the mean temperature of the 1848 January mean day ; the remainder was the correction to be used.

(2.) For any hour of the mean of days in January ; the treatment was simpler for the standard year 1848 than for other years. For 1848, the temperatures read every hour from the curve, as is mentioned above, were adopted as the temperatures applicable to the mean of observations at those hours respectively through the month. But for the subsequent years from 1849 to 1857, a process of interpolation and further correction was thus framed. It was considered that the thermometer-readings at 1^h, 3^h, 9^h, 21^h, were abundantly sufficient in number to give the average character of the daily temperature-changes through the month ; the means of interpolation between them being alone required. Therefore in 1848, the readings at 1^h, 3^h, 9^h, 21^h, were taken ; and between these were interpolated, in simple arithmetical progression between the reading for 1^h and that for 3^h, between the reading for 3^h and that for 9^h, and so on, the fictitious readings for 2^h, for 4^h, 5^h, 6^h, 7^h, 8^h, for 10^h, 11^h, 12^h, 13^h, 14^h, 15^h, 16^h, 17^h, 18^h, 19^h, 20^h, and for 22^h, 23^h, 0^h. These fictitious interpolated readings were subtracted from the curve-readings for the same hours, and the remainders gave corrections applicable to interpolated readings in order to form curve-readings. It was then held that these same corrections would apply to interpolated readings for the same month in other years. Therefore, for other years, the mean readings for January at the hours 1, 3, 9, 21, for all the years were collected on one sheet ; between the readings for 1^h and 3^h, between those for 3^h and 9^h, &c., in each year, thermometer-readings were interpolated in arithmetical progression ; and to these were applied the corrections found in 1848. In this manner, temperatures were found for every hour, possessing all desirable accuracy.

The correction to mean horizontal-force-reading was then made with the tables in ordinary use.

I now proceed with the explanation of the Tables which follow.

Table VII. gives the mean Horizontal Force on every day in which the 24 hourly readings can be taken from the photographic sheet, corrected for temperature by the process (1) described above.

Table VIII. gives the mean for each month. It will be remembered that the annual change of adjustments separates the results of one year from those of another year ; but that the results through each year ought to form a continuous series, with the exception of 1848, in which the accident at the end of June has produced an interruption.

Applying now the proportional parts of the annual increase 0·0022 to the separate months, the column "Mean corrected for Secular Variation" is formed. If the increase were uniform, and the observations perfect, the numbers of this column would be equal. There is, however, an evident diminution in the warmer months of the year, which might suggest the suspicion that the correction for temperature is insufficient. It is extremely difficult to answer for the accuracy of the temperature-correction, but I believe that here it is accurate: and I think that some light will be thrown on the origin of this apparent diminution by remarks to be made hereafter on the discussion of the hourly inequality.

In the mean for the nine years, the mean of the first three months is 0·1151, and the mean of the last three months is 0·1170, giving a secular increase of 0·0019 in nine months, or 0·0025 in one year. It will be interesting to compare this with the secular change of horizontal force found by the method of absolute measures.

The annual means of the determinations in the several yearly volumes of "Greenwich Observations, Results of Magnetical and Meteorological Observations," all made with the same instrument and in the same manner, are as follows:—

1848, omitting July 28	3·755
1849	3·759
1850	3·770
1851	3·783
1852	3·785
1853	3·791
1854, omitting January 26	3·794
1855	3·808
1856	3·815
1857	3·836

The mean of the three first is 3·760, that of the three last is 3·818, giving an increase of 0·058 in seven years, or of 0·0083 in one year. This, estimated in the same manner as the Horizontal Force in the tables under discussion, will be represented by $\frac{0\cdot0083}{3\cdot8}$, or 0·0022, for the secular increase in one year. That found above by the use of the Bifilar Magnet and the system of reductions which I have explained, is 0·0025. The agreement is highly satisfactory, and leads to the presumption that great confidence may be placed in the results of our discussions.

Table IX. gives, for every month, the mean of the Horizontal Forces at each hour through all the days of the month, corrected for temperature in the manner described above, process (2).

For each month separately, in Table IX., the mean for the month in Table VIII. was subtracted from every number in the same month in Table IX., and thus was formed the Mean Diurnal Inequality of Horizontal Force in each month. It has not been thought necessary to print this table, but the means for each year are taken to form the two next tables.

Table X. gives the Diurnal Inequality of Horizontal Force for each month; the quantities for the same month in different years being grouped, and the means taken.

Table XI. gives the Diurnal Inequality of Horizontal Force for each year, the quantities for different months in the same year being grouped, and the means taken. The law of Diurnal Inequality is seen most clearly in the column of Mean of Years. There is a well-marked diminution of force in the day, with an increase in the night. The Horizontal Force is smallest a little before 0^h Göttingen Mean Solar Time, or a little after 23^h Greenwich Mean Solar Time. This, it will be remarked, is not the hottest part of the day. The reading of the thermometers in the magnet-boxes is highest at 6^h or 7^h Göttingen time in the summer, and at 5^h in the winter. The diurnal inequality therefore is not produced by error of temperature-correction, and the general order of these numbers tends to give confidence in the correction.

3. REMARKS ON THE COMBINATON OF THE DIURNAL INEQUALITIES OF DECLINATION AND OF HORIZONTAL FORCE.

It is evident that the two Diurnal Inequalities are related quantities, produced by different resolved parts of the same force. If we compare roughly their magnitudes in the different years from 1848 to 1857, by the rude process of adding without regard of sign the numbers in each of the columns of Table VI. and Table XI., we find in the different years—

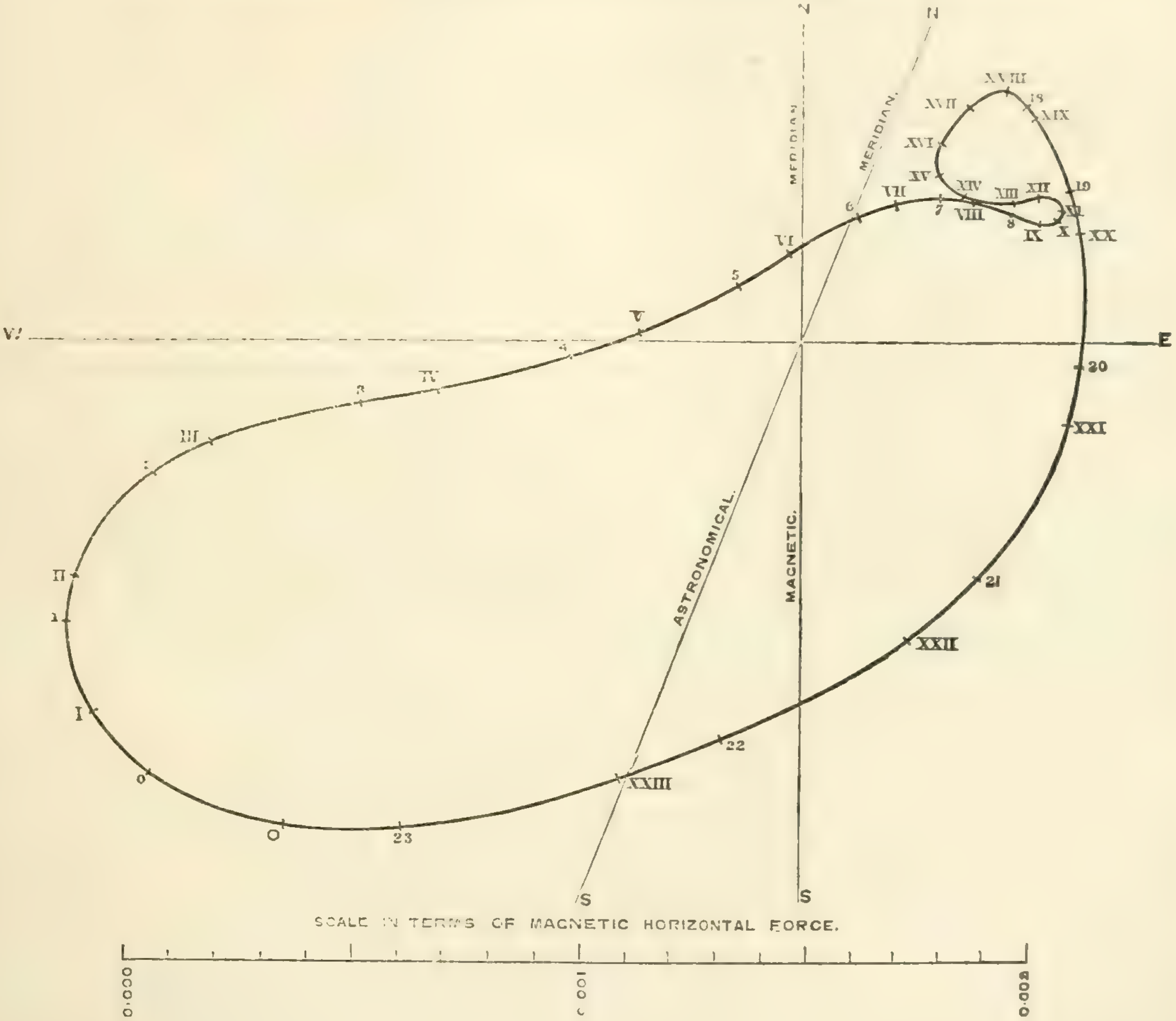
For Declination	70·1,	65·9,	64·5,	51·2,	46·5,	42·7,	45·3,	43·7,	35·6,	31·8;
For Horizontal Force	141,	124,	110,	101,	120,	96,	76,	75,	94,	106.

Although there is irregularity in the proportions of the corresponding numbers in these two lines, yet there is in both lines the broad fact of a very considerable diminution from 1848 to 1857; which, especially when the four last years are grouped together, is very nearly the same for both. I consider the irregularity therefore to be merely accidental. In like manner if we compare the inequalities in respect of their variation of magnitude through the different months, in Tables V. and X., we find a good general agreement. I therefore treat the two inequalities in combination.

Now if we trace a curve, whose ordinate in the west direction represents the numbers in the last column of Table VI., and whose ordinate in the north direction represents the numbers in the last column of Table XI., we have the following:—

DIAGRAM explanatory of the MAGNITUDE and DIRECTION of the FORCES acting on the NORTH END of the MAGNET at GREENWICH at different HOURS of the SOLAR DAY.

The Roman numerals refer to hours of Göttingen Time; the Arabic numerals to Greenwich Time. From 8 to 18 the Arabic numerals are omitted, to avoid confusion.



If the mean declination and horizontal force are the same thing as the undisturbed declination and horizontal force, the force of diurnal inequality at any time will be represented in magnitude and direction by a line drawn from the origin of co-ordinates to the point of the curve corresponding to that time. If the mean and the undisturbed are not the same, a different origin must be taken, in such a position that the preponderant measures to the curve will correspond to the preponderant forces.

Now, if we combine together these various considerations; (1) that the diurnal force is undoubtedly connected with the Sun; (2) that it is very different on different sides of the meridian, showing that the Sun does not produce it immediately, but mediately, by his influence (probably) on different parts of the Earth; (3) that the great difference in the magnitudes of diurnal force in the summer and the winter (the proportion being nearly 2 : 1) seems to show that the mediately active part of the Earth must be limited to a contracted space whose distance from Greenwich changes in a very sensible proportion from summer to winter, and may well be supposed to be a limited space over which the Sun is nearly vertical; (4) that the action while the Sun passes over Africa is much less than that which follows it: we seem to be led to the following conclusions:—

The radiation of the Sun upon the sea produces a magnetic force which attracts the north end of the magnet at Greenwich.

The radiation of the sun upon the land produces an insensible force, or none at all.

The great cause of diurnal inequality at Greenwich is the radiation of the Sun upon the North Atlantic; the radiation upon other seas having a sensible but minor effect.

I am unable to explain the origin of the singular loop from VII^h to XV^h Göttingen time, but suppose it to arise from some peculiarity in the distribution of land in the great islands of the Pacific, Australia, &c.

Now as we know that the attractions of magnetic bodies diminish very rapidly with their distance, and therefore the effect of the seas illuminated from 7^h to 17^h is very small, it is evident that the origin of co-ordinates here, or mean position, does not coincide with the undisturbed position. The undisturbed position must be somewhere near to the small loop, and then we have due preponderance given to the intense disturbing force from 22^h to 4^h Greenwich time. The mean declination of the magnets therefore will contain in its numerical expression a westerly quantity, derived from that preponderance, and the mean horizontal force will contain in its numerical expression a diminution of force, similarly derived.

And, in those months of the year when the active space under the Sun comes nearest, this westerly quantity and this diminution of force will be exaggerated; and therefore the Mean Westerly Declination (after correction for secular change) will appear greatest, and the Horizontal Force will appear least, in the summer months.

This is verified in the last columns of Table II. and Table VIII.

I present this sketch of the foundations of a theory of Diurnal Inequality as one of which I have no doubt, as applying to Greenwich. I am unable yet to examine into the practicability of extending it to other stations.

4. OBSERVATIONS OF MAGNETIC VERTICAL FORCE, REFERRED TO THE SUN'S PLACE.

As in the instance of the Horizontal Force Magnet, the time used is Göttingen Mean Solar Time, and the zero to which the photographic measures of Vertical Force are referred requires such an addition that their magnitudes shall be nearly 1·0000 ± fluctuations.

The adjustments of a Vertical Force Magnet are much more liable to change than those of the other instruments. In consequence of this, the periods of continuity of adjustment have been too much broken up to permit any important comparisons of the results at different times. In May 1848 a new magnet was mounted, and so much interruption followed that I have thought it best to reject the observations of that year. In following years there are interruptions at places marked in the Tables.

For results of diurnal inequality, the numerical inferences are as accurate as the nature of the apparatus permits, and probably are in general extremely good. Yet, though the instrument was furnished and occasionally examined by the maker of highest repute, I was never perfectly satisfied with the delicacy of its movements. Subsequently to the period of these observations, the knife-edges have been ground by Mr. Simms, and their delicacy appears to be very much increased. I have now every confidence in the observations.

The correction for Temperature was treated in the same manner as that for the temperature of the Horizontal Force Magnet.

Table XII. gives the mean of the Vertical Force Readings on every day, corrected for temperature. The interruptions by a double line ═══ denote that the adjustments have been changed, so that the readings above and below it are not comparable. The interruptions by a single line ——— denote that there has been merely a change in one of the constants of reduction (the time of vibration in the vertical plane), which produces a comparatively small change in the reading. In January 1853 the adjustments were in a state too little sensitive to give useful results. In November 1857 the clock-work was out of order.

Table XIII. contains the monthly means: the interrupting lines being placed at the divisions nearest to the exact days.

It will be remarked that there was no absolute change of adjustment in the course of the years 1850, 1851, 1855, 1856, 1857, and I have therefore grouped the observations of each month separately for all those years and have taken the mean, as worthy of considerable credit. It appears to show that the Vertical Force is sensibly greatest in the summer months. In order to exhibit the amount of variation (which at present is given in terms of Vertical Force) in terms of Horizontal Force, these numbers are multiplied by the tangent of the Dip, or tan. 68°. 45′.

Table XIV gives, for every month, the mean of the Vertical Forces at each hour through all the days of the month, corrected for temperature.

For each month separately, in Table XIV., the mean for the month in Table XIII. was subtracted from every number in the same month in Table XIV., and thus was formed the Mean Diurnal Inequality of Vertical Force in each month. The Table so formed is not printed, but the means for each year are taken to form the two next Tables.

Table XV. gives the Diurnal Inequality of Vertical Force for each month, the quantities for the same month in different years being grouped, and the means taken. To express the Inequality in terms of Horizontal Force, the numbers are multiplied by tan. 68°. 45′.

Table XVI. gives the Diurnal Inequality of Vertical Force for each year, the quantities for different months in the same year being grouped, and the means taken. As in the last Table, these values are converted into expressions in terms of Horizontal Force by multiplying by tan. 68°. 45′.

5. REMARKS ON THE RELATION OF THE VERTICAL DISTURBING FORCE TO THE DISTURBING FORCES IN THE HORIZONTAL PLANE.

The comparison of the Vertical Force, as exhibited in Tables XIII., XV., XVI., with the Horizontal Western Force in Tables II., V., VI., and the Horizontal Northern Force in Tables VIII., X., XI., presents some difficulties.

(1.) In the progress of years from 1848 to 1857, the diurnal inequality in both the horizontal elements is greatly diminished; while that in the vertical direction increases greatly from 1849 to 1850, and is sensibly stationary from 1850 to 1857. (I know no reason on the face of the observations for distinguishing 1849 from the other years, except that there had been less experience in the use of a difficult instrument.) This seems to show that it is not the same quality of the Sun which produces the horizontal disturbances and the vertical disturbance. The magnitude of the vertical disturbance, it is to be remarked, is greater than that of the horizontal disturbances.

(2.) In noting the changes in the magnitude of diurnal inequality through the months of a year, it will be remarked that all are greatest in the hottest months, but the changes of vertical force apparently less than those of the other forces.

(3.) The inequalities have as leading features one maximum and one minimum in the day (that of western force having another subordinate fluctuation). But the epochs of maximum and minimum of vertical force seem to refer very distinctly to noon at Greenwich, while those of the horizontal forces refer to other hours.

(4.) The monthly changes of inequalities generally correspond; the westerly declination, the southerly horizontal force, and the downwards vertical force, increasing in the hotter months.

II. REDUCTIONS REFERRED TO THE MOON'S PLACE.

6. OBSERVATIONS OF MAGNETIC WESTERN DECLINATION REFERRED TO THE MOON'S PLACE.

The first step in the reductions was, to mark the Lunar Days and Lunar Hours in a satisfactory way upon the Photographic Sheets. The Greenwich Mean Solar Time of Moon's Transit on each day was increased by 40^{m}, to obtain Göttingen Time of Moon's Transit, and these times were marked in coloured chalk upon the time-scales of the sheets. The intervals from transit to transit were taken numerically, and by use of these numbers different graduated scales were prepared, exhibiting multiples of lunar hours (fitted for the photographic sheets) for different lengths of the lunar day. In this way every lunar hour was marked down on the photographic sheet with great precision. After this, the process was exactly the same as for solar hours. The readings of the curve-ordinates were collected upon sheets of the same kind as those used for the Solar observations; the lines containing lunar hours, the columns containing lunar days, and the sheets containing lunar months.

The character of the means for lunar days and lunar months necessarily agrees so closely with that of the means for solar days and calendar months, that it does not appear necessary to print them. The subsequent reference to divisions of the lunar month can be made nearly as well by use of the numbers for solar days as by those for lunar days. The really valuable results are limited to those for lunar diurnal inequalities.

Table XVII. was drawn up for the purpose of examining into the possibility of any inequality of Westerly Declination depending on the Moon's age. There is not the least trace of such an inequality. It appeared, when all the numbers of the table had been collected, that a slightly erroneous value of Mean Declination had been used. This has produced the correction in the last column.

Table XVIII. contains the Lunar-Monthly Means of Magnetic Westerly Declination, at every Lunar Hour of the Lunar Day.

By comparing, for each lunation, the mean for the lunation with each of the numbers in Table XVIII., a Lunation-Table of Lunar-Diurnal Inequality was formed. This table is not printed here, but from it the following table is derived.

Table XIX. gives the Diurnal Inequality of Western Declination, as referred to the Lunar Hours of the Lunar Day. The existence of two maxima and two minima in each Lunar Day appears to be distinctly marked.

7. OBSERVATIONS OF MAGNETIC HORIZONTAL FORCE REFERRED TO THE MOON'S PLACE.

The values of Horizontal Force at the Lunar Hours were measured and entered into the sheets in the same way as those for Solar Hours. But no correction for temperature was introduced. It is evident that, while the commencement of the Lunar Day passes through all the Solar Hours, every Lunar Hour will in its turn pass through every circumstance of temperature : and thus in taking means, which for the first elements used here extend over a lunation, and in final results extend over one year or several years, the corrections for temperature on all the different days of lunation and at all the different lunar hours will be sensibly equal.

For the same reasons which apply to Declinations, it has appeared unnecessary to exhibit the mean Horizontal Force for every Lunar Day or every Lunation. These means, however, having been arranged so as to admit of the grouping of the corresponding days of different Lunations, and the yearly mean for each Lunation-Day being compared with all, the following table was formed.

Table XX. gives the mean Lunation-Inequality of Horizontal Force in each year, and in the Mean of Years. The correction for the proportional part of secular increase of Horizontal Force is applied. The numbers, in part, appear to follow some law, though accompanied with great irregularities. To diminish the latter, the means of adjacent numbers were taken four times, and the result is shown in the last column. The series of numbers (omitting cyphers) may be nearly represented by

$$11 \cos 2\theta - \frac{5}{2} \cos \theta - \frac{5}{2} \cos 3\theta;$$

the zero of θ being at 7^d nearly, and its period being a lunation ; but, in the face of irregularities, such a law claims little credit.

Table XXI. gives for each Lunation the mean of the Horizontal Forces at the same Lunar Hour through all the Lunar Days of each Lunation. By the comparison of these numbers for each Lunation with the mean for that Lunation, a lunation-table of luno-diurnal inequality is prepared, which is not printed.

Table XXII. contains, for each year, the mean for each Lunar Hour of the numbers in the last table ; exhibiting the Luno-Diurnal Inequality of Horizontal Force. There are in the Lunar Day two very well marked maxima and two minima. From year to year, the changes of magnitude of coefficient do not appear to follow any law ; and there is no general increase or diminution.

8. REMARKS ON THE COMBINATION OF THE LUNO-DIURNAL INEQUALITIES IN DECLINATION AND IN HORIZONTAL FORCE.

On comparing the last column of Table XIX. with the last column of Table XXII., it is at once seen that the laws of the two inequalities (in Declination and in Horizontal Force) are similar ; that their epochs of maxima sensibly correspond ; that their signs are the same ; but that their magnitudes are different in a proportion not very dissimilar from that of 78 : 113, that in the direction of North Horizontal Force being the greater.

It appears from this that the forces which are exhibited in these two inequalities are resolved parts of one force, which is alternately + and − ; whose direction is westward of the magnetic north meridian by the angle 34°. 40′ nearly, or westward of the astronomical north meridian by the angle 57° nearly ; and which goes through its changes twice in the lunar day.

This force cannot be explained, on the usual laws of magnetic action, by independent magnetism in the Moon, or by magnetism in the Moon induced by the Sun.

It may be explained on one of the following suppositions :—

(1.) The Earth is a great magnet with virtual poles in a definite position with respect to the Earth ; and the Moon becomes magnetic by instantaneous induction.

Or (2.) The Moon produces in the terrestrial atmosphere a tide, by the ordinary mechanical laws of formation of tides, and the compression and expansion of the oxygen or other magnetic portion of the atmosphere produce these alternate magnetic effects ; no explanation, however, being yet suggested of the peculiar direction of the force.

9. OBSERVATIONS OF MAGNETIC VERTICAL FORCE REFERRED TO THE MOON'S PLACE.

For the same reasons which apply to Declination and to Horizontal Force, I have thought it unnecessary to print the table of Mean Luno-Diurnal values of the Vertical Force, or their Lunation-Means. By comparing each of the Luno-Diurnal values with its Lunation-Mean, and taking the yearly means of numbers corresponding to the same day of Lunation, the following table is formed :

Table XXIII. shows the fluctuation in the mean Luno-Diurnal values of Vertical Force, in the course of a mean lunation. It does not appear to follow distinctly any laws.

Table XXIV. gives the Lunation-Means of Vertical Force at every Lunar Hour of the Lunar Day.

A Lunation-Table of Luno-Diurnal Inequality of Vertical Force was formed, by comparing, for each lunation, the mean for the lunation with each of the numbers in Table XXIV. This table is not printed, but by taking the means of the numbers for each year the following table is formed :

Table XXV. gives the Diurnal Inequality of Vertical Force, as referred to the Lunar Hours of the Lunar Day. There appear to be a single maximum and a single minimum in the course of each Lunar Day, but the result is not free from irregularity.

10. SUGGESTION OF ANOTHER LAW TO GUIDE THE ORDER OF REDUCTIONS OF THE MAGNETIC OBSERVATIONS.

The reductions, as far as has been described, are based upon two systems of laws ; one, that of reference to the hour-angle of the Sun, with a wider reference, by subdivision into months, to the declination of the Sun ; the other, that of reference, for some examinations, to the angular distance of the Moon from the Sun ; and, for other examinations, to the hour-angle of the Moon.

With regard to the action of the Sun, I do not perceive that any extension can be made in the investigations.

With regard to the action of the Moon, it is conceivable that the Moon is, under the action of the Sun, a magnet whose axis is directed to the Sun. Suppose the Moon to perform its apparent daily revolutions in a plane parallel to the terrestrial equator and passing through Greenwich ; put l for the latitude of Greenwich ; let α be the excess of Moon's R.A. over Sun's R.A., and θ the hour-angle by which the Moon has passed the lower meridian. Also let $\tan\beta = \frac{1}{2}\tan\alpha$, and put v for the magnetic westerly declination.

Then the following expressions will be proportional to the forces in the several directions :—

Force towards magnetic north =

$$-\cos v \,.\, \sin l \,.\, \frac{\sin\alpha}{\sin\beta} \,.\, \cos(\theta-\beta) + \sin v \,.\, \frac{\sin\alpha}{\sin\beta} \,.\, \sin(\theta-\beta)\,;$$

Force towards magnetic west =

$$+\sin v \,.\, \sin l \,.\, \frac{\sin\alpha}{\sin\beta} \,.\, \cos(\theta-\beta) + \cos v \,.\, \frac{\sin\alpha}{\sin\beta} \sin(\theta-\beta)\,;$$

Force vertically downwards =

$$-\cos l \,.\, \frac{\sin\alpha}{\sin\beta} \,.\, \cos(\theta-\beta).$$

If $\tan W = \frac{\tan v}{\sin l}$, and $\tan w = \tan v \,.\, \sin l$, these expressions become,

$$\text{Force towards magnetic north} = -\frac{\sin v}{\sin W} \,.\, \frac{\sin\alpha}{\sin\beta} \,.\, \cos(\theta-\beta+W)\,;$$

$$\text{Force towards magnetic west} = +\frac{\cos v}{\cos w} \,.\, \frac{\sin\alpha}{\sin\beta} \,.\, \sin(\theta-\beta+w)\,;$$

$$\text{Force vertically downwards} = -\cos l \,.\, \frac{\sin\alpha}{\sin\beta} \,.\, \cos(\theta-\beta).$$

In these expressions, the coefficients never change sign, and β is always in the same quadrant with α. Hence the inequalities would all depend (roughly) on the angle $\theta - \alpha$; an angle which goes through its period in $25^h.\ 45^m$ nearly of solar time ; and the observations must be arranged with reference to this period. I have not yet effected this arrangement.

Royal Observatory, Greenwich,
1861, *April* 20.

G. B. AIRY.

REDUCTIONS OF MAGNETIC OBSERVATIONS REFERRED TO THE SUN'S PLACE.

REDUCTIONS OF MAGNETIC DECLINATION REFERRED TO THE SUN'S PLACE.

TABLE I.—MEAN WESTERLY DECLINATION of the MAGNET on each ASTRONOMICAL DAY, as DEDUCED from the MEAN of TWENTY-FOUR HOURLY MEASURES of ORDINATES of the PHOTOGRAPHIC REGISTER on that DAY.

Days of the Month.	1848.												1849.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	..	49·7	49·1	52·3	50·1	54·2	55·3	53·6	52·0	..	51·2	..	..	32·5	46·1	45·3	40·4	41·7	42·0	39·7	..	(22·5)	30·7	..
2	..	49·1	48·8	53·4	50·5	53·6	54·6	..	52·2	50·8	..	..	..	33·1	44·6	43·7	40·5	..	40·6	41·9	..	(16·5)	30·0	29·8
3	..	48·3	47·7	52·8	52·2	54·0	55·5	50·4	53·4	51·9	50·4	49·6	35·3	32·9	44·7	44·7	..	..	42·2	41·7	..	..	31·6	29·5
4	..	48·9	..	54·1	51·6	55·3	55·9	52·7	51·1	53·2	..	51·3	35·3	..	44·3	41·6	39·5	40·3	43·2	..	31·9	..	..	29·4
5	..	49·2	..	..	49·2	53·6	54·1	53·9	51·7	52·7	51·1	50·6	35·6	44·7	44·5	43·4	..	40·1	42·6	..	..	..	30·6	29·4
6	..	50·0	..	..	50·5	53·1	52·2	53·1	51·8	50·3	..	52·7	34·8	44·2	43·2	43·2	..	41·3	41·9	..	..	29·9	29·7	28·0
7	..	48·2	..	..	51·4	51·7	52·8	..	50·6	51·0	..	52·3	36·3	44·0	43·4	42·0	42·0	42·7	40·3	..	..	30·5	29·8	..
8	..	48·4	..	..	50·8	53·4	53·9	49·7	48·1	49·7	..	53·2	35·9	44·7	43·4	42·6	39·1	38·5	39·7	41·5	..	31·6	29·7	28·8
9	..	48·5	..	50·0	51·2	54·0	56·6	52·2	..	52·1	..	51·1	34·8	..	44·2	43·0	41·4	38·3	38·4	43·1	28·7	32·1	30·4	28·4
10	..	48·7	..	53·5	54·2	55·7	55·0	..	.	51·9	50·7	52·0	..	44·0	..	43·2	42·0	40·1	39·8	..	29·5	30·0	30·9	29·4
11	..	49·5	..	..	52·7	55·9	55·9	52·4	..	54·1	51·3	51·9	35·0	44·9	44·7	43·4	..	41·5	41·4	39·7	26·3	31·3	31·0	29·6
12	..	48·9	..	52·9	52·3	56·2	54·0	52·7	51·3	53·1	51·1	51·1	34·7	46·1	43·6	43·3	..	..	42·0	40·2	..	30·7	31·5	30·1
13	..	49·4	..	52·1	..	..	52·7	..	50·4	52·8	..	51·2	34·7	45·6	43·8	42·5	41·2	..	41·6	..	24·2	31·1	32·1	28·2
14	..	49·5	..	..	..	54·5	53·7	..	52·1	53·1	50·3	50·3	34·8	42·8	42·8	42·3	..	40·6	42·2	39·1	26·7	31·1	29·9	28·6
15	51·6	49·8	..	..	55·7	52·6	53·0	..	50·7	52·1	49·9	52·8	34·5	44·1	42·7	..	40·0	39·9	42·2	..	26·6	31·2	30·7	28·5
16	..	49·8	..	53·5	51·7	52·6	52·7	53·6	51·0	52·4	50·3	53·0	35·9	43·1	..	41·9	..	41·4	42·3	39·5	27·0	30·6	30·6	28·8
17	50·7	..	..	..	50·6	53·8	51·9	52·8	50·2	54·6	..	..	34·9	44·9	41·1	40·8	42·7	41·8	39·8	40·1	..	29·9	29·5	28·0
18	50·6	49·2	..	..	54·1	54·3	52·0	..	52·4	..	49·3	53·5	34·5	44·0	..	40·3	42·0	40·6	40·9	..	27·2	28·5	30·0	28·3
19	51·3	..	..	..	55·5	55·0	54·1	..	52·5	..	..	52·4	34·3	43·7	44·2	..	42·1	43·0	41·0	..	25·5	29·6	30·9	28·4
20	50·2	..	..	..	56·3	53·7	54·0	50·5	..	52·5	51·2	52·9	33·8	45·0	43·2	39·3	43·6	42·0	40·9	..	26·9	30·2	29·6	29·6
21	49·2	..	56·0	..	55·1	54·9	53·3	51·9	50·3	52·4	49·0	52·4	34·3	44·4	42·9	43·2	44·6	..	40·9	..	28·3	31·3	31·8	28·7
22	48·5	50·9	52·5	..	55·1	51·5	53·5	51·8	49·9	51·3	49·3	51·1	32·4	42·6	43·8	..	43·1	..	39·7	..	26·9	32·9	31·3	..
23	49·6	48·2	55·1	52·5	52·9	52·9	54·0	51·1	50·8	..	48·3	51·3	33·6	42·1	43·0	..	..	39·8	41·6	31·6	18·8	30·6	30·6	..
24	51·2	..	53·8	53·5	52·4	52·1	..	51·1	51·3	50·8	51·2	51·7	32·2	43·6	42·3	41·9	41·5	40·3	40·7	..	..	31·5	29·8	..
25	50·1	49·0	..	52·7	51·4	53·5	..	51·6	50·5	52·5	49·1	..	32·7	45·4	44·3	43·1	41·6	40·3	..	..	24·7	32·0	31·4	28·8
26	49·4	..	56·2	51·1	53·1	52·8	54·3	52·2	51·3	51·8	52·3	..	33·0	43·8	..	43·2	40·3	..	..	31·2	..	31·6	32·5	..
27	49·3	..	55·1	51·0	54·1	53·6	52·9	52·9	51·2	51·5	51·8	..	34·4	45·9	43·1	41·5	..	39·9	40·7	31·5	25·4	..	33·9	..
28	..	49·8	54·8	52·1	53·5	53·3	52·8	53·4	52·1	51·1	49·4	..	33·7	46·2	..	41·6	..	41·6	..	31·9	..	31·3	29·5	..
29	50·2	49·1	54·2	49·7	52·3	54·5	54·1	52·9	..	49·7	50·2	..	33·6		42·6	..	42·6	41·5	40·9	31·7	31·2	30·7	30·1	..
30	49·5		..	50·2	51·8	52·9	54·3	51·7	..	50·5	51·2	..	35·6		42·8	39·9	40·4	40·8	..	..	..	..	27·2	..
31	..		53·7		52·5		52·2	53·2		50·0		..	32·2		43·1		41·5		..	31·0		30·5		..

TABLE I.—MEAN WESTERLY DECLINATION of the MAGNET on each ASTRONOMICAL DAY, &c.—*continued*.

Days of the Month.	1850.												1851.											
	January.	February.	March	April.	May.	June.	July.	August.	September.	October.	November.	December	January.	February.	March	April.	May.	June.	July.	August.	September.	October.	November.	December.
	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′	22° ′
1	..	29·6	24·7	26·9	24·9	..	24·3	21·6	20·1	..	18·1	19·0	..	20·3	19·9	..	18·3	15·5	11·5	16·9	14·5	..	21·3	20·3
2	..	29·2	25·5	25·8	24·7	22·2	25·5	22·6	20·5	..	17·9	18·6	19·9	20·8	18·5	..	21·0	15·0	11·6	17·4	14·1	..	22·0	20·5
3	..	28·8	27·6	26·1	23·7	21·6	25·0	20·9	24·5	23·5	17·0	18·9	20·1	20·6	19·4	..	19·6	15·1	13·2	18·4	..	17·1	22·4	20·1
4	..	..	26·3	..	24·6	19·8	26·9	20·2	28·9	24·6	17·7	18·6	20·5	19·8	19·8	..	..	15·2	16·1	18·1	..	17·0	21·9	19·9
5	..	..	26·6	25·7	24·1	22·8	25·0	21·5	29·2	26·7	17·3	18·5	20·8	19·8	19·7	..	..	13·3	16·5	17·8	13·1	16·2	21·6	20·6
6	..	..	26·2	24·6	25·5	26·7	23·0	22·9	27·4	25·8	17·1	18·2	20·8	19·9	19·9	18·5	21·1	13·2	16·8	18·7	..	16·4	20·8	..
7	..	27·9	..	25·8	24·4	26·2	24·8	22·6	28·4	20·7	..	20·2	20·9	18·9	19·5	18·8	21·8	..	16·6	17·8	..	15·7	20·4	19·4
8	..	27·9	28·2	26·8	26·2	26·8	24·5	..	27·2	18·2	18·7	19·9	21·2	19·9	20·2	18·5	19·8	13·3	17·8	18·6	14·4	15·6	21·4	20·5
9	..	27·4	26·9	27·4	25·7	26·0	23·8	22·2	26·2	17·4	17·6	18·4	20·3	19·0	19·4	19·6	18·9	13·8	..	18·0	..	16·3	20·9	..
10	..	..	28·0	..	23·3	23·2	24·2	21·9	25·8	18·4	17·3	18·5	20·3	18·5	21·2	20·8	19·7	13·0	17·6	17·8	13·0	16·8	22·0	19·9
11	..	27·0	25·0	..	24·1	24·3	22·3	21·9	26·5	18·5	19·0	18·2	20·4	21·2	..	..	18·5	13·3	16·4	18·1	15·5	..	19·6	19·7
12	..	26·1	25·9	26·4	26·2	25·1	22·8	21·5	26·9	17·5	18·1	17·7	20·5	19·7	20·4	..	19·8	12·9	16·4	16·8	15·3	16·0	20·1	19·5
13	30·0	..	25·9	27·1	22·2	22·1	21·6	21·6	26·5	15·1	18·5	18·5	20·6	20·1	18·0	21·2	18·2	13·9	16·7	16·7	14·2	16·1	20·2	20·0
14	28·7	27·9	26·1	28·2	24·6	27·7	22·1	22·1	26·3	15·4	18·4	18·5	21·1	19·6	19·3	21·1	18·9	16·1	14·6	17·5	10·8	16·6	20·2	[illegible]
15	28·1	28·1	25·2	27·5	25·1	26·8	22·1	21·7	24·8	18·6	18·0	18·5	19·8	19·7	20·6	21·0	19·7	13·5	15·4	16.2	13·2	18·0	19·6	20·7
16	28·0	26·7	25·2	28·1	24·8	25·0	21·2	21·2	25·3	16·7	18·1	18·0	..	..	19·2	19·0	21·6	14·1	15·3	16·2	13·3	16·4	21·1	20·5
17	28·0	28·4	26·4	26·4	23·9	24·9	22·4	20·7	25·8	16·5	18·2	18·9	20·8	19·4	19·4	22·3	19·8	13·9	17·6	18·0	14·1	15·9	20·6	20·8
18	27·8	27·6	26·2	25·4	24·8	22·9	24·5	19·7	25·9	15·6	20·3	18·3	20·9	..	19·3	..	20·1	14·6	17·3	16·5	..	15·2	19·9	20·9
19	26·8	27·3	27·4	27·6	22·6	23·7	22·0	..	26·4	15·0	19·9	18·2	..	..	19·3	..	20·2	14·9	17·4	16·7	14·8	..	19·9	20·3
20	30·8	..	26·7	25·7	23·8	23·2	19·6	20·8	23·9	15·5	20·5	17·6	22·3	..	20·7	21·6	20·4	14·3	18·2	18·4	14·9	..	..	20·4
21	28·3	27·9	26·4	25·8	21·8	21·5	21·9	20·7	23·8	16·5	20·5	17·3	18·5	20·6	18·6	21·4	19·0	14·1	17·5	17·5	14·9	..	21·7	20·9
22	27·4	26·5	26·6	25·6	22·8	22·5	20·7	..	23·9	15·8	20·2	17·2	19·9	19·9	19·8	21·6	19·2	13·6	..	16·9	..	22·2	20·7	20·3
23	28·2	..	26·7	26·0	23·9	21·5	20·6	20·7	22·8	16·0	21·0	17·1	19·9	18·3	20·1	19·6	14·8	13·8	19·7	14·6	15·7	18·5	20·9	21·0
24	28·1	28·0	29·1	23·8	25·1	22·6	19·8	21·2	24·4	17·7	21·4	16·4	19·8	19·9	20·1	20·8	15·7	15·2	19·5	14·5	16·5	16·9	20·5	20·2
25	26·9	27·5	27·0	24·8	23·5	23·5	22·2	21·3	24·8	16·8	20·7	16·7	19·5	19·8	19·9	19·9	17·1	13·4	18·3	15·3	17·9	16·1	19·9	18·9
26	28·8	26·8	26·0	24·4	23·9	22·9	21·8	22·0	23·7	18·1	19·1	17·9	20·1	19·8	20·0	20·8	18·2	13·6	18·0	17·1	16·0	16·7	19·8	19·5
27	28·4	25·9	24·4	24·5	26·6	25·6	22·3	21·5	..	16·8	19·3	..	20·1	..	20·4	19·9	17·5	14·1	17·8	15·8	16·2	16·8	19·0	20·4
28	29·2	25·7	25·8	..	26·5	26·7	24·0	21·8	..	16·9	19·7	..	20·0	19·0	..	..	16·7	14·1	..	15·3	15·3	..	20·2	..
29	29·0		25·6	25·4	24·4	24·8	21·7	21·0	25·5	16·1	19·4	..	18·8		..	21·1	16·8	14·3	17·8	16·6	..	22·0	20·0	..
30	28·1		26·0	24·0	25·0	24·4	21·1	22·3	26·8	19·4	20·4	21·5	19·7		..	20·3	14·6	13·8	16·2	17·3	16·7	22·4	21·2	..
31	28·5		24·7		23·3		21·4	20·1		18·1		..	19·7		..		15·1		17·2	16·2		21·4		..
	1852.												1853.											
1	19·6	..	21·1	22·6	23·3	17·7	15·9	17·5	15·2	13·7	10·8	12·8	..	12·4	11·9	11·2	10·2	13·5	10·6	9·2	..	..	5·9	7·6
2	..	21·9	23·1	20·3	23·0	18·5	16·6	17·4	12·5	13·5	..	14·3	..	12·6	12·2	9·7	..	11·4	9·1	10·6	..	..	5·9	6·6
3	23·2	21·6	..	22·8	23·6	19·1	..	17·6	13·2	12·9	12·3	11·2	..	12·4	11·8	..	..	..	9·7	10·4	11·6	..	6·2	6·6
4	..	20·2	21·9	21·0	..	18·2	..	17·2	11·9	14·2	12·0	10·9	..	11·7	10·8	..	11·2	..	9·0	9·3	12·5	12·3	..	..
5	24·2	21·7	22·9	21·9	22·6	..	..	16·3	13·6	..	11·6	10·3	..	11·5	11·1	7·8	10·6	9·4	9·9	10·7	13·7	..	..	..
6	21·7	23·2	22·5	22·5	21·7	17·0	..	19·0	14·5	12·9	11·2	13·2	..	11·8	11·2	12·2	10·3	9·3	10·1	11·6	16·7	7·2	..	..
7	22·4	..	19·2	23·3	22·8	19·2	21·1	18·9	14·1	13·3	11·1	12·8	..	11·7	..	10·4	10·1	8·6	9·7	10·4	13·8	6·7	7·1	..
8	21·8	..	22·3	22·4	23·2	19·6	18·8	18·3	16·0	13·1	11·0	12·7	..	11·6	..	10·9	10·3	8·3	11·1	11·2	14·4	7·2	6·7	6·5
9	23·1	..	21·0	23·8	22·6	19·7	21·0	..	18·9	12·5	11·9	12·1	..	11·3	12·7	..	10·8	10·8	11·4	11·3	12·3	6·6	..	6·4
10	21·3	22·6	19·7	22·4	23·1	22·3	..	16·1	15·8	13·8	11·3	11·6	..	10·5	10·8	10·8	10·7	9·2	9·8	9·7	10·9	5·9	6·9	..
11	22·4	22·7	22·8	21·1	22·7	..	17·4	19·0	13·1	..	..	11·5	13·2	11·6	10·9	12·4	10·3	9·8	12·3	9·0	9·5	7·3	5·8	5·4
12	22·6	22·2	23·8	22·0	22·3	20·0	18·3	19·3	14·7	13·2	12·1	11·0	12·1	13·0	10·4	10·1	9·7	10·5	..	9·7	11·4	7·1	5·6	5·9
13	21·2	21·2	22·5	22·4	23·3	17·9	18·1	18·5	13·2	12·5	..	11·7	12·9	13·1	11·9	10·9	14·9	12·1	10·8	9·6	..	8·6	7·1	7·9
14	23·0	20·4	21·6	20·5	23·2	17·6	19·2	17·7	12·5	12·9	10·9	11·0	12·5	14·7	12·1	..	8·6	12·7	13·1	10·1	11·4	6·5	6·8	..
15	22·4	..	19·7	22·3	22·4	..	18·5	18·1	..	13·8	11·8	11·3	..	12·7	11·1	16·2	9·1	8·7	11·7	9·1	..	..	3·8	..
16	23·3	20·3	22·7	23·9	20·9	16·2	18·6	18·7	14·5	13·9	11·2	11·3	..	11·9	..	..	..	8·9	11·5	10·3	..	7·9	4·4	5·5
17	23·7	..	22·0	22·6	..	17·0	19·1	18·8	12·8	12·3	12·2	9·6	13·3	12·1	..	18·4	..	9·2	11·8	10·9	10·3	7·9	4·6	..
18	23·4	..	22·1	23·8	..	17·6	18·4	18·0	14·6	..	12·7	10·3	13·4	11·4	12·4	14·7	11·7	11·6	11·6	10·8	9·0	6·8	4·5	..
19	..	..	21·9	22·5	..	17·9	18·9	17·3	17·6	11·9	11·4	11·2	13·2	12·0	11·3	14·7	15·5	11·9	11·5	10·5	9·7	8·1	3·8	..
20	23·8	..	20·4	..	..	..	19·2	17·4	..	11·8	11·5	10·3	12·5	11·6	11·6	11·3	12·6	11·6	10·9	..	12·4	8·9	4·4	5·4
21	22·6	..	19·2	23·1	18·0	17·3	18·4	..	15·3	12·5	11·5	11·1	12·7	..	11·7	23·2	12·4	10·7	10·8	..	12·1	7·4	..	..
22	24·7	22·7	21·3	23·1	..	..	17·8	21·6	14·0	12·6	11·2	10·6	11·7	13·5	11·7	..	12·2	..	12·3	..	12·3	5·9	..	6·3
23	24·2	22·3	21·5	..	..	17·0	18·7	..	14·0	12·8	11·4	..	12·4	11·9	11·1	..	12·0	10·3	10·4	..	12·2	7·0	5·2	6·1
24	22·4	20·9	21·7	22·3	..	16·8	19·2	16·9	14·0	12·6	11·1	10·6	12·3	11·7	11·3	11·2	..	9·3	9·5	11·1	..	7·8	..	6·7
25	22·5	22·0	20·6	22·6	20·3	16·4	20·0	..	..	12·1	10·1	..	12·5	..	10·8	11·5	12·3	11·1	9·5	11·8	..	..	4·2	6·9
26	22·5	22·1	21·3	23·1	20·4	17·1	21·5	..	13·6	12·8	11·5	11·6	11·9	12·1	12·7	10·7	11·8	11·0	9·8	11·2	13·1	6·1	4·1	7·3
27	22·6	20·5	..	22·7	20·1	16·7	20·8	14·9	14·5	13·1	10·9	..	12·0	14·2	11·4	10·6	..	11·0	10·9	..	8·5	6·5	4·1	..
28	23·7	22·3	21·2	21·8	20·9	18·3	20·3	13·6	14·6	13·0	11·6	..	11·3	..	11·3	10·3	13·1	12·6	10·8	10·7	..	6·1	6·1	..
29	22·2	23·0	19·7	21·4	20·4	17·6	..	14·3	..	12·8	12·3	..	11·5		10·9	10·7	..	10·7	..	9·7	..	5·8	5·3	..
30	22·8		20·1	21·4	..	17·7	19·5	13·6	14·0	11·7	13·0	..	10·9		10·0	10·0	..	9·5	..	10·2	11·4	..	5·8	..
31	21·5		19·7		18·3		19·3	13·6		11·3		..	11·9		11·4		10·5		11·0	8·9		..		..

Table I.—Mean Westerly Declination of the Magnet on each Astronomical Day, &c.—*continued.*

Days of the Month.	1854.												1855.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	..	64·4	61·9	62·1	62·4	62·0	61·8	62·7	59·1	..	57·8	59·0	..	49·7	50·9	49·5	50·6	53·2	..	48·3	..	47·4	..	46·2
2	..	..	62·7	62·9	..	..	60·7	61·9	59·8	..	58·4	56·6	..	..	..	48·6	49·3	..	..	..	48·5	46·8	..	46·9
3	..	..	61·4	62·9	62·9	..	61·8	62·3	59·8	..	58·2	57·6	50·1	47·5	48·6	..	49·3	51·5	..	..	48·9	48·1	45·4	46·7
4	..	63·3	62·6	62·8	61·8	60·6	61·5	62·3	59·0	..	58·0	57·5	50·5	46·9	48·8	..	49·9	50·7	48·8	47·6	48·7	45·5	45·3	46·5
5	..	62·9	62·8	62·9	62·0	60·1	60·9	..	61·1	..	59·4	57·3	50·3	48·1	48·7	49·1	49·4	50·0	..	..	..	47·8	43·7	46·9
6	.	..	..	62·7	62·5	61·0	60·4	..	59·7	..	58·7	57·8	49·5	47·8	48·3	50·0	48·6	52·3	..	..	48·7	47·5	..	..
7	64·4	64·3	62·5	..	61·5	..	60·1	..	60·5	..	59·2	57·6	..	46·6	48·0	48·2	47·9	51·9	..	49·7	..	47·0	..	45·4
8	64·5	62·6	63·7	62·6	59·7	61·4	60·5	..	59·1	55·8	..	57·4	..	48·5	47·9	47·4	49·1	..	50·4	..	49·2	47·9	..	46·2
9	64·7	63·0	63·4	63·0	61·2	62·1	..	..	59·8	57·6	59·5	58·5	50·2	48·3	48·3	49·2	47·7	..	50·4	..	..	47·6	..	46·6
10	64·7	64·6	63·8	..	62·1	60·6	59·9	61·4	..	57·4	58·0	58·3	48·8	..	48·5	48·5	49·3	50·6	..	..	..	46·9	46·4	46·4
11	65·1	..	63·7	64·7	61·4	60·1	60·5	60·4	60·2	58·1	58·4	..	48·1	47·8	49·0	47·8	..	50·1	50·9	..	..	46·9	46·2	47·0
12	64·6	63·1	62·0	63·2	63·3	62·1	60·8	61·7	59·0	56·9	58·2	57·3	49·3	46·8	..	48·2	49·3	51·2	..	51·4	47·5	46·2	45·5	47·1
13	64·4	62·7	61·0	62·7	63·4	60·6	60·9	60·8	58·7	57·9	58·3	57·2	49·6	46·9	47·8	49·2	49·4	..	..	..	48·4	46·9	..	46·1
14	63·6	60·7	62·8	61·7	61·5	59·3	61·5	61·5	59·2	58·4	58·3	58·0	49·5	..	47·9	49·1	50·3	50·5	48·3	..	49·0	..	..	46·3
15	64·2	61·5	..	63·0	60·2	60·5	61·3	61·0	59·1	..	58·2	56·0	48·7	..	49·7	48·8	48·7	51·5	..	..	48·2	..	46·5	46·4
16	64·4	..	..	62·3	61·5	62·0	..	61·1	..	58·6	58·8	57·2	49·7	38·5	48·4	48·3	50·1	52·0	..	47·8	48·8	45·6	45·6	47·0
17	64·0	61·1	62·7	63·4	59·5	60·4	60·6	..	59·4	59·0	58·4	..	..	..	49·6	47·3	49·9	50·7	48·6	49·2	48·2	..	44·6	46·8
18	65·3	61·2	62·5	63·3	62·5	61·0	59·4	..	..	59·1	58·4	57·8	49·4	..	47·7	..	48·0	..	46·6	48·1	48·1	45·8	45·6	..
19	65·6	62·8	62·9	62·0	59·4	60·6	60·0	..	59·0	58·2	59·3	56·9	..	48·5	48·8	49·2	49·8	..	48·2	..	..	46·9	45·7	..
20	..	62·5	62·6	59·1	59·6	61·8	59·7	60·9	58·9	58·2	58·7	58·4	49·7	48·9	49·0	47·9	48·3	51·2	..	..	46·1	45·5	45·8	..
21	64·7	62·2	62·6	58·1	61·4	62·3	59·3	62·0	59·0	58·1	58·7	57·1	51·0	49·5	..	50·1	..	50·4	50·5	49·1	46·1	46·0	46·8	..
22	64·0	63·1	62·2	61·1	63·4	61·8	57·8	60·6	..	58·6	58·5	57·0	..	..	49·4	49·4	49·7	49·9	50·5	49·8	46·8	46·6	..	..
23	63·9	62·1	62·3	63·6	61·1	62·1	59·0	61·1	59·4	57·1	58·4	58·0	50·1	..	49·7	49·9	49·9	50·6	..	47·7	44·6	45·4	45·0	46·5
24	64·9	..	61·5	62·4	61·0	61·6	60·9	60·9	59·5	58·9	58·1	57·0	50·0	52·5	..	49·1	..	50·7	50·9	..	47·0	46·8	45·6	46·5
25	63·3	..	63·2	61·1	61·9	60·9	59·4	..	59·3	57·2	59·3	58·8	50·6	51·2	50·5	50·1	49·0	51·3	49·5	..	47·1	46·8	45·9	46·8
26	63·5	62·6	62·6	61·7	61·4	60·8	60·2	..	58·9	57·7	..	..	49·7	50·0	49·3	..	49·2	50·8	50·5	48·1	46·5	47·2	45·9	..
27	63·7	61·7	62·7	61·7	62·2	60·8	..	59·2	59·7	..	..	..	49·7	51·2	48·9	49·3	..	..	..	48·0	..	46·4	45·5	..
28	63·2	62·0	..	62·5	62·6	61·3	..	60·0	58·7	57·9	58·9	..	..	49·8	49·3	49·9	..	50·5	48·9	..	48·3	45·9	..	..
29	63·4		63·3	62·1	62·4	..	..	..	58·4	57·4	58·5	..	49·2		48·9	48·0	50·3	..	49·2	..	46·9	47·3	44·7	..
30	63·6		61·6	63·1	63·1	61·6	61·3	59·1	..	57·7	57·1	..	50·6		49·3	50·4	..	50·1	..	48·5	47·9	47·2	45·5	..
31	64·2		62·4		61·6		62·7	59·3		57·3		..	50·3		49·4		..		..	..		46·9		..
	1856.												1857.											
1	..	46·9	45·5	46·0	44·5	43·5	..	44·4	42·2	..	40·2	39·6	..	37·0	37·0	..	35·3	..	..	34·3	33·9	37·4	35·1	32·2
2	..	45·8	45·5	47·3	43·5	42·4	..	44·5	42·9	..	..	39·9	..	..	35·9	34·6	35·4	..	32·8	33·3	34·2	33·1	..	33·3
3	44·1	46·8	45·8	46·2	43·1	43·5	..	44·3	..	..	..	..	..	..	35·3	35·8	35·2	..	33·2	33·0	..	..	..	32·7
4	..	..	44·9	46·3	44·1	..	..	45·0	..	..	..	40·9	39·3	..	35·3	35·5	34·9	..	34·2	36·2	35·4	..	35·7	33·1
5	..	44·9	44·5	..	43·8	..	43·4	44·8	42·3	..	42·5	..	..	..	35·3	35·2	34·9	..	34·4	35·1	..	32·4	35·4	..
6	44·4	46·1	46·0	..	..	..	44·0	44·9	42·9	..	..	40·8	..	36·2	34·2	35·2	35·3	..	33·8	34·8	34·8	..	..	32·4
7	..	44·8	45·4	..	..	..	47·1	42·5	42·2	..	..	40·3	..	36·6	34·8	36·6	..	..	33·4	35·8	34·7	40·7	34·9	32·6
8	..	..	45·0	44·2	..	43·7	44·2	43·7	..	..	41·3	39·4	..	36·6	34·6	36·3	..	..	32·2	37·7	36·6	50·0	33·7	31·5
9	45·7	45·7	45·8	44·5	44·6	43·5	..	43·2	..	..	40·6	..	..	36·3	35·4	36·0	..	..	32·5	..	35·0	44·7	..	32·2
10	45·6	46·9	46·0	44·3	43·5	..	43·3	42·4	..	..	41·6	..	36·5	37·0	..	35·2	..	35·6	34·1	34·9	33·8	39·1	..	..
11	45·6	47·3	45·8	44·4	42·6	44·1	44·2	43·7	..	..	41·3	..	37·0	36·0	37·9	38·9	..	33·7	..	36·4	38·2	43·0	..	..
12	48·1	46·1	44·8	43·7	43·4	..	44·5	44·7	..	..	40·8	..	36·2	35·8	36·7	37·4	..	35·2	..	34·4	42·2	40·1	..	..
13	..	46·4	..	..	..	..	45·4	43·5	..	..	40·7	..	36·7	36·7	..	34·8	35·5	34·4	..	..	34·8	37·4	..	34·2
14	45·8	46·7	45·6	44·7	..	..	44·5	44·5	..	42·5	41·3	..	37·0	36·9	36·2	35·7	37·4	..	..	36·6	37·1	35·0	..	33·3
15	45·6	46·0	45·3	44·2	..	..	46·2	..	..	41·9	41·2	..	36·1	..	36·3	36·0	..	34·3	37·4	..	37·1	35·8	..	31·7
16	45·5	46·3	44·6	..	..	..	45·3	..	..	41·4	41·3	39·8	33·7	36·4	36·5	35·0	..	34·6	38·2	33·7	34·9	37·7	..	..
17	..	..	44·6	43·7	..	..	44·4	..	..	39·9	40·8	38·8	36·6	..	35·7	34·4	..	35·2	39·8	..	33·9	35·8	..	..
18	45·6	..	..	43·6	..	44·8	44·9	..	..	39·4	40·7	40·1	36·6	36·1	35·6	34·2	..	..	39·5	34·1	..	36·6	33·5	33·0
19	46·0	46·2	..	44·3	..	..	..	43·7	..	38·6	40·6	39·9	36·0	36·9	37·9	..	..	..	35·5	34·9	33·2	34·2	31·9	33·0
20	46·5	45·4	45·2	44·4	..	44·3	..	..	..	40·9	39·7	40·3	36·3	36·9	37·2	..	..	34·8	..	35·3	33·3	37·7	31·8	32·4
21	45·9	..	46·1	43·5	..	44·2	..	43·3	..	..	..	..	..	36·5	36·1	35·6	..	33·8	39·5	34·9	36·3	39·0	32·4	32·1
22	45·8	45·4	46·2	40·7	..	44·7	46·4	42·5	..	..	40·5	..	..	36·6	36·5	38·0	..	35·8	..	35·2	35·5	39·8	32·5	31·9
23	45·1	46·0	45·3	44·5	..	45·0	43·9	..	..	41·3	39·9	..	36·2	36·1	35·9	37·4	..	34·7	..	33·3	..	36·4	..	..
24	45·2	46·0	45·4	43·2	43·9	45·2	45·2	..	..	..	40·1	..	36·4	36·8	36·5	35·8	..	..	..	33·6	35·0	36·2	31·6	..
25	44·3	45·7	44·8	..	43·0	45·3	44·4	..	..	..	40·1	..	37·0	36·9	36·4	35·8	..	..	33·4	34·6	38·1	33·0	32·7	33·3
26	45·5	45·9	44·5	42·8	42·8	44·2	43·6	42·1	..	40·0	40·8	40·8	36·3	..	36·5	37·0	..	..	34·2	33·3	36·0	32·1	31·3	..
27	45·8	..	..	43·6	42·6	43·4	43·4	41·5	..	..	41·2	40·6	36·3	38·9	35·7	36·2	..	..	34·0	33·3	35·5	33·1	32·8	31·0
28	45·9	..	..	43·0	..	41·6	44·9	..	..	..	39·7	42·2	36·0	39·2	37·1	36·7	..	..	33·5	31·9	34·3	33·6	32·2	..
29	46·2	..	45·7	43·6	43·7	40·1	45·1	..	..	..	40·6	..	36·7		36·6	36·4	..	..	34·0	39·1	35·4	34·1	31·6	..
30	46·5		45·3	41·9	42·9	43·9	45·2	..	..	..	39·8	..	35·7		35·9	35·9	..	..	33·2	36·6	..	35·0	..	..
31	45·7		44·3		..		43·9	42·6		42·8		..	36·9		35·7		35·6		33·8	..		..		..

Table II.—Mean Westerly Declination of the Magnet in each Month, as deduced from the Mean of the Mean Daily Determinations in each Month; and Mean Westerly Declination in each Year, as deduced from the Mean of the Mean Monthly Determinations: showing the Monthly and Annual Progress of Secular Variation.

Month.	1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.	Mean of Years.	Mean corrected for Secular Change 7′·9 annually.
	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′
January....	22. 50·0	22. 45·7	22. 28·4	22. 20·3	22. 22·6	22. 12·5	22. 4·2	21. 50·0	21. 45·6	21. 36·5	22. 13·6	22. 13·6
February...	22. 49·3	22. 44·0	22. 27·5	22. 19·8	22. 21·8	22. 12·1	22. 2·8	21. 48·3	21. 46·0	21. 36·7	12·8	13·5
March......	22. 52·9	22. 43·6	22. 26·3	22. 19·8	22. 21·3	22. 11·4	22. 2·4	21. 48·9	21. 45·5	21. 36·1	12·8	14·1
April	22. 52·1	22. 42·7	22. 26·0	22. 20·6	22. 22·3	22. 12·0	22. 2·3	21. 49·0	21. 44·1	21. 36·0	12·7	14·7
May	22. 52·6	22. 41·5	22. 24·4	22. 18·9	22. 21·8	22. 11·2	22. 1·7	21. 49·3	21. 43·5	21. 36·0	12·1	14·7
June	22. 53·7	22. 40·8	22. 24·0	22. 14·0	22. 18·0	22. 10·4	22. 1·1	21. 50·9	21. 43·7	21. 34·9	11·2	14·4
July.......	22. 53·7	22. 41·1	22. 22·8	22. 16·6	22. 18·9	22. 10·7	22. 0·4	21. 49·5	21. 44·7	21. 34·7	11·3	15·3
August	22. 52·5	22. 37·3	22. 21·4	22. 17·0	22. 17·7	22. 10·2	22. 0·8	21. 48·9	21. 43·6	21. 35·2	10·5	15·1
September..	22. 51·3	22. 27·4	22. 25·4	22. 14·6	22. 14·3	22. 11·5	21. 59·4	21. 47·6	21. 42·9	21. 35·6	9·0	14·3
October....	22. 51·9	22. 29·8	22. 18·2	22. 17·3	22. 12·9	22. 7·3	21. 58·0	21. 46·7	21. 41·1	21. 36·9	8·0	13·9
November..	22. 50·4	22. 30·6	22. 18·8	22. 20·7	22. 11·5	22. 5·3	21. 58·5	11. 45·6	21. 40·8	21. 33·3	7·6	14·1
December...	22. 51·7	22. 28·8	22. 18·6	22. 20·2	22. 11·5	22. 6·4	21. 57·5	21. 46·2	21. 40·2	21. 32·9	7·4	14·6
Mean	22. 51·8	22. 37·8	22. 23·5	22. 18·3	22. 17·9	22. 10·1	22. 0·8	21. 48·4	21. 43·5	21. 35·4		

Table III.—Monthly Means of all the actual Diurnal Ranges of the Western Declination, as deduced from the twenty-four hourly measures of each day (the hours of extreme readings not being in all cases the same): showing the Monthly and Annual Changes of Actual Diurnal Range.

Month.	1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.	Mean for each Month through the whole Period of Years.
	′	′	′	′	′	′	′	′	′	′	′
January....	14·1	12·3	8·5	8·2	9·6	9·4	12·2	8·6	5·9	6·2	9·5
February...	14·9	14·7	11·8	9·4	13·3	9·9	13·7	10·9	7·4	7·3	11·3
March......	16·8	16·2	14·8	11·4	15·1	13·9	12·9	12·5	8·2	9·5	13·1
April	16·4	17·8	14·4	12·8	16·1	12·7	14·5	14·2	10·6	10·5	14·0
May	16·1	15·1	14·2	14·0	13·2	10·7	12·9	11·7	8·7	10·4	12·7
June	16·1	15·6	15·3	11·4	13·8	13·9	11·1	10·5	9·7	8·7	12·6
July.......	16·8	15·4	14·6	13·8	12·6	12·4	11·6	10·6	9·9	9·2	12·7
August	16·4	12·8	14·8	14·2	13·0	11·0	12·4	10·9	11·5	8·8	12·6
September..	15·7	17·3	15·7	13·9	14·9	11·7	11·2	11·2	11·3	12·4	13·5
October....	16·2	14·7	14·3	12·2	13·5	12·3	10·1	11·0	7·8	10·1	12·2
November ..	13·5	11·1	9·5	9·2	10·4	8·9	6·5	9·3	7·2	7·1	9·3
December...	10·5	8·1	7·5	9·3	10·2	9·2	7·0	5·7	6·0	8·0	8·2
Mean	15·3	14·3	12·9	11·6	13·0	11·3	11·3	10·6	8·7	9·0	11·8

TABLE IV.—MEAN MONTHLY DETERMINATION of the WESTERN DECLINATION of the MAGNET at every HOUR of the DAY: obtained by taking the MEAN of all the DETERMINATIONS at the same HOUR of the DAY through the MONTH.

Hour. Göttingen Mean Solar Time.	1848. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	1849. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
	55·0	54·1	59·0	56·8	58·0	59·2	58·6	58·6	57·8	56·9	55·6	55·0	48·2	47·2	48·8	48·2	47·2	46·5	47·0	42·8	33·4	34·6	34·4	31·0
1	56·1	56·0	61·6	60·0	61·2	62·1	62·2	61·5	60·1	59·2	55·8	55·9	49·9	49·9	51·7	51·1	48·8	48·3	48·4	44·2	35·2	37·1	35·2	32·4
2	56·9	56·8	61·7	61·1	61·2	62·3	62·6	61·9	60·1	60·5	55·7	56·6	51·3	50·8	52·4	52·0	49·5	48·8	49·1	44·7	35·1	36·9	34·9	32·2
3	55·3	56·0	60·2	59·6	59·4	61·1	61·2	60·5	57·4	58·4	54·5	55·1	50·6	51·1	51·3	50·7	48·9	48·5	48·5	43·4	33·6	35·8	33·9	30·9
4	54·5	53·6	57·4	56·6	57·0	59·3	59·0	57·5	54·8	55·9	53·1	53·9	48·7	49·6	48·7	48·1	46·6	46·9	46·2	41·4	31·6	33·3	32·6	30·4
5	51·6	51·1	54·9	55·1	55·3	56·9	57·2	54·8	52·4	53·3	51·1	52·8	47·6	47·6	45·9	45·3	44·5	44·5	44·2	39·4	28·9	31·7	31·8	29·6
6	52·0	49·5	52·5	52·9	53·4	54·6	55·0	52·2	51·1	52·3	50·6	52·4	47·2	46·3	44·4	43·0	42·6	42·6	42·4	37·5	28·5	30·1	30·9	29·3
7	51·0	49·8	51·6	51·2	52·0	53·0	53·5	51·3	50·7	51·7	50·0	51·5	46·6	45·7	43·9	42·4	41·1	40·3	40·8	36·4	27·1	29·0	30·5	29·2
8	50·5	48·9	51·4	50·3	50·4	52·4	52·9	51·5	49·6	50·6	49·2	51·0	45·7	44·2	43·0	41·9	40·3	39·2	40·2	36·0	26·2	27·4	28·9	28·4
9	48·3	46·5	51·7	50·2	51·0	52·3	52·7	51·0	49·6	50·1	47·3	50·0	43·8	42·5	42·3	41·5	40·3	38·9	39·8	35·4	25·6	27·2	28·4	27·6
10	46·2	46·3	51·7	50·0	51·2	52·6	52·6	51·0	48·7	49·9	46·4	49·2	43·1	41·2	41·0	41·3	40·3	38·9	40·1	35·1	24·9	27·2	27·6	27·3
11	46·3	45·6	50·4	50·3	50·9	53·0	52·6	50·5	48·5	49·4	46·6	49·3	42·3	30·5	40·7	40·7	40·3	39·3	39·9	35·7	25·4	27·9	27·2	26·9
12	47·3	46·2	49·9	49·8	51·1	52·8	52·7	50·5	49·0	48·5	46·5	49·3	43·8	40·7	41·1	40·6	40·1	39·1	39·5	35·3	25·5	28·6	26·9	26·5
13	47·5	46·8	50·3	50·6	50·5	52·4	52·4	50·3	48·8	48·8	47·8	49·0	44·1	40·5	41·1	40·6	39·5	39·5	39·9	35·6	25·8	28·1	27·9	26·9
14	47·9	46·8	50·8	50·1	50·0	52·7	51 6	49·9	49·1	49·1	48·6	50·1	44·5	40·8	41·7	40·3	39·5	39·5	39·7	35·2	26·4	27·9	29·3	27·5
15	47·5	47·0	51·0	50·6	50·6	52·3	51·9	50·1	49·1	49·6	49·0	50·9	44·4	41·6	41·2	39·3	39·0	39·0	38·2	35·6	26·1	28·2	29·6	27·3
16	47·8	46·9	49·8	49·8	49·8	51·6	51·8	49·8	49·7	49·8	49·8	51·1	44·4	41·8	41·3	39·5	39·0	38·5	38·7	35·4	26·2	28·1	29·8	27·5
17	47·8	46·6	49·4	49·5	49·1	50·2	50·4	49·6	48·8	50·3	50·6	50·6	44·0	41·9	41·3	39·0	38·4	37·5	37·8	35·0	26·1	28·5	30·0	28·2
18	47·3	46·7	49·4	50·0	48·4	48·3	48·8	48·7	48·6	50·7	49·8	51·0	44·5	42·5	40·4	39·3	37·3	36·1	35·7	34·4	25·1	28·7	30·3	28·6
19	48·3	47·9	50·4	49·0	48·1	47·8	48·2	47·4	48·3	50·8	50·3	50·8	44·9	42·4	40·7	38·1	36·2	35·2	35·8	33·6	24·5	28·1	30·2	28·8
20	47·7	47·4	48·6	48·2	47·9	48·2	48·1	47·5	47·7	49·6	50·0	51·0	44·4	41·8	39·0	38·4	36·3	34·5	36·1	33·3	23·4	27·1	30·3	28·9
21	47·7	46·8	49·2	47·6	49·2	48·9	48·8	48·6	47·6	48·7	49·4	50·6	43·2	41·0	38·5	38·0	37·4	36·1	37·4	34·4	23·0	26·8	30·0	28·8
22	49·7	48·3	51·4	49·7	51·8	50·9	51·5	51·2	49·9	49·6	50·3	51·3	44·5	41·6	40·6	40·6	39·6	38·5	40·0	37·0	24·8	27·7	31·2	28·9
23	51·9	50·6	55·4	52·7	55·6	55·1	54·4	55·3	53·7	52·7	52·6	53·2	36·2	43·8	44·3	45·2	43·8	42·8	43·9	40·1	29·0	31·0	32·5	29·5

	1850.												1851.											
0	31·1	31·0	31·4	30·6	30·3	30·9	28·4	27·7	32·1	24·0	22·6	21·3	23·4	23·5	23·9	22·3	23·0	18·1	21·9	23·4	20·6	22·6	24·2	23·2
1	33·3	33·0	33·8	33·2	32·0	32·0	30·1	29·5	33·3	25·3	23·6	21·8	24·2	24·2	25·0	25·2	24·3	19·2	23·2	24·7	21·3	23·3	25·1	23·3
2	33·9	35·3	34·6	33·8	32·1	32·4	30·6	29·9	33·7	24·9	23·0	21·6	24·6	24·3	25·4	26·4	25·2	19·6	23·4	24·4	20·8	22·6	24·4	23·1
3	32·9	33·1	33·5	32·9	30·6	31·0	29·4	28·3	32·5	24·4	21·6	20·5	23·6	23·1	24·4	26·0	24·8	19·2	22·7	22·5	18·9	21·7	23·4	22·7
4	30·9	30·9	31·7	30·8	28·4	29·0	27·7	25·9	30·3	21·3	20·4	20·0	21·9	21·7	23·0	24·6	23·2	18·1	21·1	20·4	16·5	19·9	22·3	22·2
5	29·8	29·3	28·8	28·2	26·1	26·7	26·0	23·5	27·7	19·2	19·5	19·2	21·1	20·2	21·3	23·1	21·4	16·9	19·4	18·2	14·8	18·1	21·1	20·7
6	29·1	27·9	26·7	26·2	24·5	24·7	24·2	21·5	27·0	18·1	19·0	18·5	20·1	20·2	20·2	21·8	19·8	15·3	17·7	16·5	13·8	17·5	20·5	20·2
7	28·6	27·6	25·9	24·5	23·4	22·7	22·7	20·1	24·8	16·9	18·3	18·0	20·4	19·6	19·4	20·4	18·6	14·3	17·0	14·9	12·4	16·7	19·8	19·9
8	27·7	26·6	25·2	24·2	22·7	21·9	22·0	19·7	24·2	16·1	17·9	17·4	19·3	19·2	18·8	19·6	17·8	13·9	16·1	14·6	11·0	16·0	19·4	18·8
9	27·0	25·7	24·6	24·2	22·9	21·5	21·1	19·5	23·3	15·2	17·5	16·7	18·9	18·1	18·6	19·6	17·8	13·6	15·6	14·0	11·9	15·4	19·0	18·1
10	26·1	25·2	24·1	24·3	22·8	21·4	21·1	19·9	22·8	15·1	16·3	16·7	18·1	17·5	18·6	19·5	17·4	13·6	15·1	14·6	12·2	15·7	18·4	17·2
11	25·9	24·8	23·8	24·0	23·0	21·7	20·6	19·3	23·0	15·3	16·7	17·0	18·7	17·6	18·4	19·5	17·2	13·7	14·7	14·5	11·8	14·2	18·1	17·7
12	26·5	25·0	23·0	24·1	22·9	22·5	20·8	19·4	23·4	16·2	17·3	17·2	18·6	18·1	18·2	19·6	17·8	13·3	14·7	15·0	12·6	14·9	18·0	18·4
13	26·1	25·0	23·1	24·4	22·6	21·6	20·5	19·6	23·2	16·2	17·7	17·7	18·9	18·1	18·1	19·8	17·6	13·2	14·7	14·7	12·8	15·3	18·8	18·9
14	26·1	25·9	22·9	24·3	22·8	22·1	20·5	19·1	22·8	15·6	18·0	18·0	19·1	18·7	18·0	20·1	17·0	12·5	14·1	15·6	13·3	15·8	19·4	18·8
15	26·4	25·9	23·4	24·2	22·9	22·3	20·2	18·8	22·7	16·5	18·0	18·2	19·7	17·8	18·3	19·8	17·3	12·6	14·1	15·5	14·0	15·9	19·7	19·6
16	26·3	26·0	23·6	24·3	22·6	21·6	19·7	18·7	22·6	16·5	18·1	18·3	19·8	18·9	18·5	19·8	17·6	12·6	14·9	14·7	13·4	15·3	20·3	19·9
17	26·8	26·2	24·2	24·3	22·0	20·8	19·4	18·9	22·6	17·2	17·9	18·0	19·7	18·6	18·1	19·8	17·4	11·3	14·4	15·1	13·6	16·5	20·3	19·2
18	27·7	26·4	24·1	24·0	20·6	19·8	18·5	17·7	22·7	17·1	18·0	17·6	19·4	18·8	18·3	19·9	16·7	10·4	12·9	14·4	13·3	16·5	20·4	19·8
19	27·9	26·4	23·9	22·8	19·6	19·3	18·2	17·0	21·7	16·9	17·9	17·9	19·6	19·0	18·6	19·1	16·0	10·0	12·8	13·6	13·3	16·8	20·3	20·1
20	27·7	26·1	23·2	21·7	19·6	19·2	18·3	16·9	20·6	16·0	17·8	18·3	19·3	18·9	17·4	17·8	15·1	9·4	12·2	13·1	12·8	16·1	20·4	20·4
21	27·4	25·0	23·0	21·5	20·7	20·6	19·4	18·4	20·8	15·4	17·5	18·2	19·0	18·5	16·5	15·1	14·4	9·9	12·5	14·8	12·9	15·1	20·0	20·5
22	27·7	25·7	24·8	24·1	23·2	23·4	21·6	21·0	24·2	16·9	18·0	18·7	19·1	18·8	17·7	15·6	15·9	12·2	15·0	17·5	15·1	15·5	20·3	20·9
23	28·9	27·9	27·5	27·0	27·2	27·5	25·0	24·7	28·5	20·3	20·0	20·2	20·4	21·1	20·4	18·4	19·7	15·2	18·7	21·2	18·0	19·1	22·3	22·2

TABLE IV.—MEAN MONTHLY DETERMINATION of the WESTERN DECLINATION of the MAGNET, &c.—*continued.*

1852.

Hour. Göttingen Mean Solar Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°
0	24·4	23·5	25·7	26·9	26·3	22·3	22·4	22·7	19·3	17·8	14·5	14·1
1	25·7	24·7	27·3	28·8	27·8	23·7	24·2	24·4	20·7	18·6	15·8	14·4
2	26·2	25·6	27·9	29·9	27·5	24·6	24·9	23·8	20·3	19·0	15·9	14·8
3	25·4	25·9	27·3	27·8	26·5	23·6	24·1	22·4	19·1	18·4	14·9	13·9
4	24·3	24·1	25·1	25·5	25·0	22·6	22·5	20·8	17·4	15·3	13·0	12·2
5	22·7	23·0	22·3	23·3	23·6	20·9	20·5	18·6	14·2	13·7	12·3	10·8
6	21·6	21·0	19·7	21·6	22·0	19·0	19·3	16·9	12·9	11·9	10·9	11·5
7	22·2	20·8	19·5	19·1	20·0	17·8	18·4	15·9	12·6	11·7	10·3	10·8
8	22·4	20·3	18·8	18·1	19·6	16·4	17·7	15·9	12·3	10·5	10·2	10·7
9	21·0	19·3	18·0	18·4	19·8	16·4	16·8	16·3	11·1	10·5	8·5	8·5
10	20·8	19·8	18·2	19·7	20·6	17·2	17·8	16·1	10·5	10·1	8·6	8·1
11	20·0	18·8	19·5	21·5	21·1	17·7	17·4	16·5	11·0	9·5	8·9	8·3
12	20·7	19·5	19·5	21·5	21·8	17·4	17·2	15·5	11·0	9·6	9·3	9·3
13	21·5	20·7	19·8	22·2	21·2	16·5	17·8	16·4	12·2	10·8	10·0	9·9
14	21·5	21·8	20·0	21·9	21·2	16·9	18·3	16·6	12·6	11·2	10·6	10·5
15	22·1	21·1	20·9	22·9	20·3	17·1	17·3	17·1	12·4	12·3	11·2	11·2
16	22·8	22·8	20·7	23·1	21·6	16·9	17·5	16·7	12·9	12·1	11·1	11·9
17	23·0	22·6	21·4	22·6	21·2	15·9	16·8	16·6	13·6	12·5	11·3	11·4
18	23·3	22·4	21·9	22·2	19·1	14·7	15·7	15·7	14·8	12·2	11·7	12·2
19	23·1	22·4	21·5	20·5	18·2	13·5	15·7	14·4	13·8	11·8	11·5	12·2
20	22·3	21·9	20·1	18·4	17·5	13·3	16·1	14·5	12·9	11·3	11·6	12·4
21	21·6	20·9	17·7	17·1	17·8	13·9	16·7	15·0	13·3	10·6	11·0	12·1
22	20·7	19·5	18·7	19·2	20·0	15·8	18·7	17·2	14·8	11·3	11·1	11·7
23	22·4	20·5	21·8	23·2	23·7	18·5	20·7	19·8	17·5	15·5	12·5	12·3

1853.

Hour. Göttingen Mean Solar Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°
0	14·0	14·8	15·3	14·9	15·1	14·4	14·3	13·2	16·3	11·0	8·0	9·0
1	14·8	15·7	17·1	16·6	16·6	16·4	16·4	15·7	17·1	12·7	8·7	9·7
2	15·7	15·8	16·9	17·6	16·5	16·9	16·7	15·8	16·9	13·6	8·3	9·4
3	15·4	15·3	16·3	16·3	14·7	16·5	16·6	14·7	15·1	11·8	7·4	8·5
4	14·4	14·3	14·2	15·1	13·4	15·5	15·5	12·8	12·9	10·4	6·4	7·7
5	14·1	12·5	12·7	13·8	11·9	13·4	13·3	11·0	11·7	8·1	5·4	6·4
6	12·9	12·7	11·2	12·4	10·4	11·9	11·8	10·1	11·1	7·2	5·3	6·5
7	13·3	12·5	10·4	10·4	9·5	10·5	10·2	9·0	10·8	7·4	4·2	4·2
8	12·0	11·8	9·3	10·8	9·0	9·9	9·8	8·9	10·4	6·7	3·6	4·4
9	11·2	11·1	9·4	10·0	9·9	10·0	9·7	8·9	10·7	5·3	3·6	4·7
10	10·6	10·4	8·3	10·4	9·7	8·5	10·1	9·2	10·1	3·9	2·8	4·1
11	10·5	9·6	8·2	9·3	10·3	7·9	9·6	9·4	9·6	4·9	3·3	4·0
12	9·7	9·0	9·2	9·9	10·4	8·4	9·5	9·0	9·1	5·6	4·1	4·3
13	11·2	9·5	9·6	10·5	10·7	9·0	9·0	8·8	10·2	6·0	4·4	4·7
14	11·1	10·4	10·3	11·0	11·0	8·6	9·4	9·4	9·8	6·6	5·1	5·1
15	11·3	10·9	10·7	11·7	11·0	9·1	8·9	9·7	10·1	6·5	5·6	5·4
16	11·7	10·9	10·9	10·5	10·9	8·6	9·0	9·3	9·3	6·9	5·6	6·2
17	11·9	11·2	11·0	10·9	10·1	8·5	7·8	8·6	9·5	6·1	5·2	6·5
18	12·4	11·3	10·2	11·2	9·8	7·6	7·1	8·4	10·6	6·4	5·2	7·0
19	12·3	11·8	10·3	8·7	8·9	6·9	6·6	8·2	10·0	6·4	5·1	6·8
20	12·6	11·4	9·5	11·0	8·1	6·6	7·1	7·3	9·7	5·1	4·5	7·4
21	11·8	12·1	9·9	11·4	8·7	6·7	7·7	8·0	10·2	4·8	4·6	7·2
22	11·9	12·4	11·2	12·0	10·5	8·6	9·7	9·2	12·1	5·6	5·0	6·7
23	12·4	13·2	13·5	13·1	12·6	11·1	11·9	11·4	14·2	8·2	6·5	7·7

1854.

	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°
0	67·4	66·0	66·0	66·6	66·5	64·8	64·0	66·1	64·5	61·4	61·0	59·6
1	68·6	67·2	67·4	68·5	68·1	66·1	65·3	67·6	65·4	62·1	61·3	59·7
2	67·7	67·8	68·3	69·7	68·4	66·6	65·6	67·5	64·8	61·6	61·0	59·1
3	66·7	67·0	67·2	68·1	67·4	66·0	65·6	66·2	63·2	61·0	60·1	58·5
4	65·6	66·0	66·0	66·1	65·7	64·7	64·2	63·6	60·9	60·1	59·3	58·0
5	64·4	64·1	64·1	64·8	64·4	63·4	63·0	61·9	59·7	58·5	58·7	56·8
6	64·3	62·7	62·2	62·4	63·1	62·2	61·7	60·9	58·5	57·9	58·1	57·0
7	63·4	61·2	59·2	60·8	61·7	61·4	60·6	59·8	58·1	57·8	58·1	56·7
8	63·3	60·6	60·5	60·3	60·8	60·5	60·0	59·6	57·8	57·0	57·4	56·6
9	61·1	59·4	59·8	59·9	60·0	60·5	59·6	59·5	56·9	56·4	56·9	56·2
10	61·3	59·0	60·2	59·4	60·0	60·6	59·4	59·5	57·3	55·0	56·8	55·0
11	61·0	58·3	59·6	58·9	59·5	60·6	60·2	59·4	57·7	54·7	56·4	55·3
12	62·1	59·5	60·3	59·5	59·5	60·2	59·6	59·3	57·5	55·5	56·9	56·2
13	62·4	59·5	60·6	60·1	59·9	60·0	58·9	58·9	58·1	56·4	57·7	56·8
14	62·5	60·8	61·6	60·5	59·6	60·2	58·6	58·0	58·2	57·1	58·0	57·2
15	64·0	62·4	61·5	61·3	60·4	60·1	58·9	58·6	58·0	57·1	58·5	57·9
16	63·7	62·6	61·3	60·5	59·4	59·5	58·6	59·2	57·2	57·8	58·8	58·2
17	63·4	63·0	61·1	61·6	59·0	58·4	58·0	58·8	57·5	57·2	58·6	58·2
18	63·3	63·4	61·9	61·3	58·0	57·2	56·9	57·5	58·3	57·9	58·8	58·5
19	63·9	63·1	62·2	60·8	57·7	57·1	56·4	57·6	57·6	58·1	58·4	57·8
20	64·5	62·8	61·2	60·2	58·2	57·2	56·5	57·7	57·9	57·5	58·5	57·8
21	64·6	63·1	61·4	60·4	59·4	57·6	57·8	59·1	58·2	56·9	58·3	57·8
22	65·6	63·2	61·6	61·3	61·5	59·7	59·5	61·3	60·1	57·2	58·3	57·7
23	66·7	64·3	63·4	63·4	63·8	62·4	61·5	63·7	62·5	59·1	57·6	58·5

1855.

	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°
0	52·5	50·9	52·4	53·3	53·4	54·3	52·3	53·0	53·1	50·2	48·2	48·3
1	53·0	51·7	54·7	55·4	55·2	55·4	54·6	55·0	53·7	51·5	49·3	48·9
2	53·2	52·3	55·1	56·2	55·2	55·7	54·6	55·3	52·8	51·7	49·3	48·1
3	52·8	52·1	54·4	54·9	54·1	55·1	53·3	54·1	50·9	50·2	48·3	47·2
4	51·9	51·8	52·8	53·4	52·1	54·0	51·9	52·4	49·1	48·9	47·2	46·4
5	51·4	50·3	51·5	51·9	50·9	52·7	50·4	50·6	47·3	47·5	46·1	46·2
6	51·0	47·9	50·0	48·8	49·5	51·3	49·4	49·1	46·3	47·0	45·1	45·8
7	50·0	48·2	47·4	47·8	48·7	50·8	49·3	48·2	45·4	45·9	44·4	45·6
8	48·5	47·3	46·8	46·8	47·7	50·1	48·5	47·7	45·8	45·5	44·1	45·0
9	48·0	46·0	46·8	46·4	47·1	49·9	48·3	47·8	45·2	44·7	43·4	44·7
10	48·0	45·2	45·8	46·4	47·3	49·7	48·2	47·7	45·4	43·8	43·4	44·5
11	48·0	45·8	46·0	45·4	47·5	49·9	48·4	47·2	45·5	44·3	43·0	45·2
12	47·3	45·5	46·6	45·6	48·0	50·5	48·2	46·9	47·0	44·4	44·0	45·7
13	47·8	45·2	46·2	46·8	48·0	50·3	48·4	47·4	45·5	45·1	44·3	45·8
14	48·8	47·0	47·4	47·1	47·7	50·6	48·5	47·4	46·8	45·2	45·4	46·1
15	49·5	47·0	47·5	47·3	47·8	50·8	48·6	48·1	46·9	45·4	45·5	46·2
16	49·5	47·0	48·0	47·6	47·8	49·4	48·4	47·5	45·9	46·4	45·0	46·3
17	49·4	47·6	47·5	47·4	47·7	48·7	48·4	47·2	46·1	45·7	45·7	46·3
18	49·6	47·3	47·0	47·4	47·2	47·9	47·2	46·3	46·3	45·5	44·6	46·2
19	49·3	47·7	46·8	47·3	47·1	47·7	47·2	46·2	46·4	46·0	45·1	46·0
20	49·8	48·1	46·3	46·8	47·0	47·9	47·5	45·6	46·1	45·3	44·8	46·2
21	50·4	48·7	47·1	46·3	47·1	48·2	48·1	46·0	45·9	45·2	45·2	46·6
22	49·7	49·1	48·7	48·3	48·7	49·8	48·7	49·2	48·0	45·4	45·5	46·9
23	50·4	49·8	50·5	50·6	51·6	51·7	50·5	49·0	50·9	47·5	46·6	47·7

TABLE IV.—MEAN MONTHLY DETERMINATION of the WESTERN DECLINATION of the MAGNET, &c.—*concluded.*

Hour. Göttingen Mean Solar Time.	1856.												1857.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21	21	21°	21°	21°	21°
0	46·8	47·7	48·0	47·3	46·7	47·0	47·7	48·9	48·3	44·5	43·0	41·7	39·9	39·4	39·8	40·0	40·2	37·5	37·2	38·7	40·3	39·8	36·2	35·7
1	47·3	48·5	49·7	49·3	48·2	48·4	49·4	49·9	48·5	45·2	43·8	42·6	38·7	40·5	41·4	41·6	41·1	38·0	37·6	39·4	40·6	40·7	36·9	36·1
2	47·1	48·8	49·7	49·6	48·0	48·9	49·9	49·5	48·7	44·8	43·3	42·4	39·4	40·8	41·1	41·5	40·9	37·7	37·5	38·9	39·0	40·0	36·4	35·6
3	45·9	48·2	48·9	48·6	47·0	48·4	49·4	47·9	46·7	43·0	42·4	41·5	38·5	40·3	39·8	40·6	40·0	37·5	37·1	37·2	36·5	38·6	35·8	34·8
4	45·8	47·4	47·4	47·1	45·9	47·4	48·3	45·5	44·3	41·6	41·7	40·8	37·4	38·9	37·9	39·3	38·6	36·2	36·0	35·0	34·7	37·0	34·7	33·9
5	45·3	45·5	45·7	45·8	44·9	46·0	46·7	44·0	42·9	41·0	41·4	40·4	37·0	37·1	36·5	37·4	37·4	35·2	34·9	33·6	33·0	35·8	33·6	33·0
6	45·5	45·7	44·9	44·8	44·0	44·7	45·7	42·7	41·6	40·1	40·3	39·8	36·6	36·6	35·3	35·8	36·9	34·0	33·1	32·9	32·6	35·0	32·7	32·8
7	44·4	45·0	44·6	44·4	43·3	43·7	45·1	42·1	41·5	39·5	39·7	39·7	36·2	35·8	34·8	34·6	35·2	34·0	32·9	33·7	32·5	34·6	32·3	32·4
8	44·4	44·7	43·9	43·6	42·5	43·5	44·1	42·3	40·1	38·7	39·9	39·1	35·6	35·4	34·6	34·2	35·0	34·4	33·4	34·0	32·7	34·2	31·9	31·5
9	44·2	44·7	44·2	43·1	42·6	43·3	43·8	42·1	40·7	38·9	39·4	37·9	35·0	35·2	34·5	34·1	34·8	34·6	34·3	34·1	33·2	33·6	31·3	30·8
10	44·2	43·7	44·2	42·8	42·8	43·2	43·4	42·2	41·1	38·8	38·3	38·4	34·6	35·0	34·5	34·0	35·1	34·9	34·3	34·4	33·4	33·8	31·5	30·6
11	44·4	44·4	44·2	42·7	43·1	43·0	43·4	41·7	42·3	38·8	38·4	38·5	34·2	34·8	34·8	33·9	34·8	35·4	34·9	34·5	34·0	34·7	31·0	30·7
12	44·9	45·1	44·3	42·3	43·0	42·9	43·3	42·4	41·8	39·9	38·9	39·0	34·5	35·0	34·6	33·7	34·5	35·3	34·9	34·6	34·8	35·3	31·6	30·9
13	45·4	45·4	44·5	42·3	43·0	42·6	43·4	42·6	42·4	40·1	39·8	39·4	35·0	35·5	35·2	34·2	33·2	35·3	34·8	35·0	35·0	36·5	32·0	31·0
14	45·8	46·2	44·7	42·7	42·8	42·7	43·4	42·8	42·9	41·4	40·4	39·8	35·7	36·1	35·7	34·8	35·2	35·3	34·7	35·0	35·5	37·0	32·6	31·7
15	45·8	46·0	45·0	42·5	43·1	42·7	43·5	42·3	41·7	41·6	41·0	39·9	36·4	36·3	35·4	35·2	34·9	35·7	34·6	35·0	36·0	37·5	33·1	32·2
16	46·1	46·1	44·7	42·3	42·8	42·6	43·6	42·2	42·4	41·3	41·1	40·0	36·8	36·4	35·1	35·0	34·8	35·1	34·2	35·0	35·5	37·7	33·3	32·3
17	46·0	46·1	44·7	43·0	42·1	42·0	42·9	41·7	41·3	41·4	41·2	40·1	36·6	36·5	35·1	34·9	34·2	34·0	33·9	34·7	35·3	37·8	33·2	32·3
18	46·1	46·1	44·6	42·8	41·2	41·8	42·3	41·0	40·5	41·1	41·0	40·5	36·8	36·5	35·1	34·9	33·1	33·0	33·6	34·2	35·5	37·9	33·2	32·8
19	45·9	46·3	44·6	42·3	40·8	40·7	41·9	40·7	40·2	40·4	40·8	40·5	36·7	36·1	35·3	34·2	32·5	32·7	33·7	34·0	35·9	37·7	33·2	33·2
20	46·0	46·2	44·1	41·8	40·3	40·3	41·4	40·1	40·7	39·6	40·8	40·4	36·5	35·8	34·8	33·3	32·9	32·4	33·4	34·4	36·2	37·2	33·2	33·6
21	46·0	45·9	44·0	41·5	40·7	40·7	41·6	41·4	41·8	39·5	40·6	40·5	36·0	35·2	34·1	33·5	33·6	32·3	33·5	35·2	36·7	37·1	33·0	33·6
22	45·4	45·3	44·7	42·2	41·8	42·2	43·2	43·5	44·0	41·4	40·8	40·9	35·8	35·2	34·9	35·1	35·6	33·4	33·8	35·9	37·5	37·6	33·7	34·0
23	45·6	46·2	46·3	44·2	44·0	43·1	45·1	46·7	46·5	43·3	41·8	41·3	36·9	36·8	37·3	37·7	38·2	35·1	35·2	36·9	38·8	39·0	33·4	34·8

TABLE V.—MEAN, through the RANGE of YEARS, of the MONTHLY MEAN DETERMINATIONS of the DIURNAL INEQUALITY of DECLINATION; exhibited separately for the different Months.

Hour. Göttingen Mean Solar Time.	1848 to 1857.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
0	+2·7	+3·0	+4·2	+4·0	+4·6	+4·4	+4·1	+5·1	+5·6	+4·3	+3·2	+2·5
1	+3·6	+4·3	+6·2	+6·3	+6·2	+5·8	+5·8	+6·7	+6·6	+5·6	+4·0	+3·1
2	+4·1	+5·0	+6·5	+7·1	+6·4	+6·2	+6·2	+6·7	+6·2	+5·5	+3·7	+2·9
3	+3·1	+4·4	+5·5	+5·8	+5·3	+5·5	+5·5	+5·3	+4·4	+4·3	+2·7	+2·0
4	+2·0	+3·0	+3·6	+4·0	+3·5	+4·2	+3·9	+3·1	+2·3	+2·4	+1·5	+1·2
5	+0·9	+1·2	+1·6	+2·2	+2·0	+2·5	+2·3	+1·1	+0·3	+0·6	+0·5	+0·2
6	+0·5	+0·2	−0·1	+0·3	+0·5	+0·9	+0·7	−0·4	−0·7	−0·3	−0·2	0·0
7	0·0	−0·1	−1·2	−1·2	−0·7	−0·3	−0·3	−1·3	−1·4	−0·9	−0·8	−0·6
8	−0·6	−0·9	−1·6	−1·7	−1·5	−0·9	−0·8	−1·4	−2·0	−1·7	−1·3	−1·1
9	−1·7	−1·9	−1·8	−2·0	−1·5	−1·1	−1·1	−1·6	−2·2	−2·5	−2·0	−1·9
10	−2·3	−2·5	−2·2	−1·9	−1·4	−1·1	−1·1	−1·5	−2·3	−2·7	−2·5	−2·3
11	−2·5	−2·8	−2·3	−2·1	−1·3	−0·9	−1·1	−1·6	−2·1	−2·6	−2·6	−2·1
12	−2·1	−2·5	−2·2	−2·1	−1·2	−0·9	−1·3	−1·7	−1·8	−2·2	−2·2	−1·7
13	−1·6	−2·2	−2·0	−1·6	−1·5	−1·1	−1·3	−1·5	−1·5	−1·7	−1·5	−1·4
14	−1·3	−1·4	−1·5	−1·4	−1·4	−1·0	−1·4	−1·6	−1·3	−1·3	−0·8	−0·9
15	−0·9	−1·2	−1·3	−1·2	−1·4	−1·0	−1·7	−1·4	−1·3	−0·9	−0·4	−0·5
16	−0·7	−0·9	−1·4	−1·5	−1·5	−1·5	−1·7	−1·6	−1·5	−0·8	−0·2	−0·2
17	−0·4	−0·8	−1·4	−1·4	−2·0	−2·4	−2·3	−1·8	−1·6	−0·7	−0·2	−0·3
18	−0·3	−0·7	−1·5	−1·4	−3·0	−3·5	−3·4	−2·6	−1·4	−0·5	−0·2	0·0
19	−0·4	−0·5	−1·4	−2·4	−3·6	−4·1	−3·7	−3·2	−1·8	−0·7	−0·3	0·0
20	−0·5	−0·8	−2·4	−3·0	−3·8	−4·3	−3·6	−3·4	−2·2	−1·5	−0·4	+0·2
21	−0·8	−1·1	−2·7	−3·5	−2·8	−3·7	−3·0	−2·3	−2·0	−2·0	−0·6	+0·2
22	−0·6	−0·9	−1·4	−1·9	−1·2	−1·7	−1·1	−0·2	+0·1	−1·2	−0·1	+0·4
23	+0·6	+0·6	+1·2	+0·8	+1·9	+1·1	+1·4	+2·4	+3·0	+1·6	+1·0	+1·3

TABLE VI.—MEAN, through the RANGE of MONTHS, of the MONTHLY MEAN DETERMINATIONS of the DIURNAL INEQUALITY of DECLINATION; exhibited separately for the different Years.

Hour.	January to December.											
	1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.	Mean of Years.	Equivalent in Terms of Horizontal Force.
0	+5·2	+4·7	+5·0	+4·2	+3·8	+3·3	+3·7	+3·4	+3·0	+3·3	+3·96	+0·00115
1	+7·5	+6·6	+6·6	+5·6	+5·1	+4·7	+4·9	+4·8	+4·2	+4·0	+5·40	+ 157
2	+8·0	+7·0	+7·0	+5·8	+5·5	+4·9	+4·9	+4·9	+4·2	+3·7	+5·58	+ 162
3	+6·4	+6·2	+5·7	+4·4	+4·6	+4·0	+4·0	+3·9	+3·0	+2·7	+4·49	+ 131
4	+4·2	+4·2	+3·8	+2·0	+1·8	+2·6	+2·6	+2·6	+1·8	+1·2	+2·77	+ 81
5	+2·0	+2·3	+1·9	+1·4	+0·9	+1·1	+1·2	+1·3	+0·7	0·0	+1·28	+ 37
6	+0·5	+1·0	+0·5	+0·3	−0·5	+0·2	+0·2	0·0	−0·2	−0·9	+0·11	+ 3
7	−0·4	0·0	−0·7	−0·5	−1·3	−0·7	−0·9	−0·7	−0·7	−1·3	−0·72	− 21
8	−1·1	−1·0	−1·4	−1·3	−1·8	−1·2	−1·2	−1·4	−1·2	−1·5	−1·31	− 38
9	−1·8	−1·7	−1·9	−1·6	−2·5	−1·4	−1·9	−1·9	−1·4	−1·6	−1·77	− 52
10	−2·2	−2·1	−2·2	−1·8	−2·3	−1·9	−2·1	−2·1	−1·6	−1·6	−1·99	− 58
11	−2·4	−2·2	−2·2	−2·0	−2·0	−2·0	−2·3	−2·1	−1·4	−1·4	−2·00	− 58
12	−2·4	−2·2	−2·0	−1·7	−1·9	−1·9	−1·9	−1·8	−1·2	−1·3	−1·83	− 53
13	−2·2	−2·0	−2·0	−1·6	−1·3	−1·5	−1·7	−1·6	−1·4	−1·0	−1·63	− 47
14	−2·1	−1·8	−2·0	−1·5	−1·0	−1·1	−1·4	−1·1	−0·5	−0·5	−1·30	− 38
15	−1·7	−2·0	−1·9	−1·3	−0·7	−0·8	−0·9	−0·8	−0·6	−0·2	−1·09	− 32
16	−2·0	−1·8	−2·0	−1·1	−0·4	−0·9	−1·0	−1·0	−0·5	−0·3	−1·10	− 32
17	−2·4	−2·1	−2·0	−1·3	−0·5	−1·1	−1·2	−1·0	−0·8	−0·5	−1·29	− 38
18	−2·9	−2·5	−2·3	−1·6	−0·7	−1·2	−1·3	−1·4	−1·1	−0·7	−1·57	− 46
19	−2·9	−2·9	−2·7	−1·7	−1·3	−1·3	−1·5	−1·5	−1·4	−0·8	−1·80	− 52
20	−3·4	−3·3	−3·0	−2·2	−1·9	−1·7	−1·6	−1·6	−1·7	−0·9	−2·13	− 62
21	−3·3	−3·2	−2·8	−2·6	−2·2	−1·5	−1·2	−1·3	−1·5	−0·9	−2·05	− 60
22	−1·4	−1·5	−1·0	−1·4	−1·3	−0·5	−0·2	−0·2	−0·5	−0·2	−0·82	− 24
23	+1·8	+1·6	+1·9	+1·4	+1·2	+1·2	+1·5	+1·3	+1·0	+1·3	+1·42	+ 41

REDUCTIONS OF MAGNETIC HORIZONTAL FORCE REFERRED TO THE SUN'S PLACE.

TABLE VII.—MEAN HORIZONTAL MAGNETIC FORCE (diminished by a Constant of 0·8850 nearly) on each ASTRONOMICAL DAY, as deduced from the Mean of Twenty-four hourly Measures of Ordinates of the Photographic Register on that day, each corrected for Temperature.

1848.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	..	..	0·1140	0·1128	..	..	..	0·1056	0·1098	0·1095	0·1122	0·1124
2	..	0·1120	·1137	·1116	..	0·1209	0·1053	..	·1095	·1094	·1129	·1124
3	..	·1122	·1137	..	..	·1207	·1050	..	·1095	·1097	·1128	..
4	..	·1120	·1139	..	0·1189	·1208	·1052	·1060	..	·1100	..	..
5	..	..	..	·1122	·1181	·1202	·1047	·1054	..	·1097	·1138	·1125
6	..	..	·1138	..	..	·1206	..	·1047	..	·1098	..	·1119
7	..	..	·1139	..	·1191	·1192	·1048	..	·1094	·1096	..	·1123
8	..	·1118	·1134	..	..	·1211	·1050	..	..	..	..	·1115
9	..	·1115	·1136	·1138	·1192	·1213	·1059	·1044	..	·1094	..	·1119
10	..	·1117	..	..	..	..	·1056	..	..	·1100	·1118	·1118
11	..	·1124	·1146	..	·1189	·1214	..	·1050	..	..	·1115	·1122
12	..	·1123	..	·1141	·1190	·1218	·1022	·1048	·1091	·1096	·1123	·1116
13	..	·1121	·1148	·1148	..	·1226	·1037	..	·1092	..	·1124	..
14	..	·1127	..	·1142	·1206	·1209	..	..	·1094	..	..	..
15	..	..	..	..	·1211	·1203	·1040	..	·1091	·1096	·1126	·1123
16	..	·1131	..	..	·1205	·1208	·1038	..	·1097	..	·1125	·1125
17	0·1111	·1132	..	..	..	..	·1041	..	..	..	..	·1103
18	..	·1134	·1123	..	..	·1216	·1045	..	·1083	..	..	·1116
19	·1118	..	..	..	·1202	·1222	·1044	·1061	·1086	..	·1104	·1117
20	·1117	..	..	..	·1210	·1210	·1045	..	·1085	·1082	·1112	..
21	·1118	..	·1125	·1149	·1207	·1210	·1050	..	..	·1090	·1097	·1120
22	·1124	..	·1124	·1140	·1201	·1206	·1050	·1090	..	..	..	·1123
23	·1120	..	·1134	..	·1201	·1214	..	..	·1083	..	·1107	..
24	·1111	..	·1133	·1155	..	·1217	..	..	·1088	·1104	·1119	·1120
25	·1121	..	·1127	·1153	·1195	·1223	·1046	·1103	·1090	..	..	·1124
26	·1121	..	..	..	·1187	·1220	·1045	·1103	..	·1099	·1132	..
27	·1125	·1131	·1133	..	·1186	·1220	·1046	..	·1095	·1106	..	..
28	..	..	..	·1181	·1180	·1224	·1049	·1097	·1099	·1113	·1114	..
29	·1128	..	..	·1166	..	..	·1051	·1094	..	..	·1118	..
30	..		·1132	..	·1200	..	·1047	..	..	..	·1121	..
31	..		·1123		·1213		·1048	..		..		..

1849.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	..	..	0·1135	0·1140	0·1134	0·1136	..	0·1123	0·1138	0·1124	0·1125	..
2	..	0·1147	·1134	·1147	·1143	..	..	·1127	·1130	·1128	·1130	0·1120
3	..	..	·1139	·1148	..	..	..	·1127	·1126	·1129	·1129	·1126
4	0·1137	·1142	·1137	..	..	..	..	·1129	·1124	·1130	·1130	·1133
5	·1145	·1141	·1140	·1143	·1130	..	0·1136	·1128	·1130	·1136	·1135	·1134
6	·1146	·1141	·1141	·1146	..	1137	·1131	..	·1133	·1137	·1136	·1133
7	·1140	..	..	..	..	..	·1137	·1131	·1134	·1129	·1134	..
8	..	·1145	·1146	·1154	·1130	..	..	·1139	·1130	·1129	·1131	·1130
9	·1139	·1145	·1146	..	·1135	..	·1136	·1130	·1136	·1133	·1132	·1132
10	·1139	·1140	·1145	·1154	·1140	..	·1133	..	·1136	·1132	·1138	·1130
11	·1141	..	·1147	·1161	..	..	·1140	·1129	·1134	·1124	·1124	·1131
12	..	·1149	·1149	·1156	..	..	..	·1132	·1131	·1130	·1132	·1128
13	·1139	·1143	·1149	..	·1131	·1124	·1135	..	·1118	·1131	·1120	·1133
14	·1128	·1137	·1151	·1152	..	..	·1136	·1122	·1115	·1121	·1127	·1131
15	·1130	·1141	·1147	..	..	·1129	·1136	·1128	·1127	·1123	..	·1132
16	·1138	·1132	·1150	..	..	·1137	·1140	·1131	·1119	·1124	·1135	·1137
17	1131	·1141	·1148	·1161	·1134	·1139	·1148	·1129	·1126	·1126	·1137	·1136
18	·1134	·1130	·1141	·1161	..	..	·1146	..	·1114	·1124	·1138	..
19	·1136	·1125	·1141	·1161	·1131	·1137	·1140	..	·1122	·1127	·1126	·1130
20	·1138	·1129	·1141	·1168	·1143	·1132	·1132	·1123	·1133	·1127	·1128	..
21	·1150	·1130	·1145	·1165	·1133	..	·1136	..	·1133	·1128	·1132	·1129
22	·1145	·1127	·1143	..	·1140	·1130	·1121	..	·1134	·1108	·1132	·1128
23	·1137	·1131	·1146	..	·1136	·1130	·1130	..	·1131	·1115	·1135	·1136
24	..	·1139	·1150	..	..	·1136	·1128	..	·1122	·1119	..	..
25	..	·1143	·1155	·1151	·1135	·1136	·1130	·1123	·1125	·1120	·1138	·1152
26	1134	·1144	..	·1148	·1131	·1140	·1134	·1129	·1129	·1124	·1136	..
27	·1137	·1125	..	..	..	·1146	·1128	·1136	·1126	..	..	..
28	·1143	·1136	..	·1142	..	·1143	·1126	·1133	·1123	·1120	..	..
29	·1149		·1145	..	·1139	·1141	·1131	·1139	·1128	·1127	·1105	..
30	·1137		·1142	·1136	..	..	..	·1138	..	·1120	·1098	..
31	..		·1143		..		..	·1136		·1120		..

TABLE VII.—MEAN HORIZONTAL MAGNETIC FORCE on each ASTRONOMICAL DAY, &c.—*continued.*

1850.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	..	0·1144	0·1136	0·1128	0·1130	..	0·1126	0·1132	0·1098	..	0·1123	0·1124
2	..	·1135	·1139	·1134	·1135	0·1134	·1112	·1132	·1091	..	·1124	·1119
3	..	·1142	·1140	·1135	·1125	..	·1120	·1120	·1107	0·1102	·1125	·1122
4	..	..	·1133	..	·1126	·1154	·1112	·1112	·1096	·1106	·1129	·1121
5	..	·1152	·1140	·1144	.1137	·1161	·1100	·1113	..	·1112	·1127	·1124
6	..	·1146	·1137	·1131	·1135	·1114	·1096	·1108	·1097	·1109	·1128	·1122
7	..	·1168	..	·1125	..	·1116	·1100	..	·1094	·1099	..	·1133
8	..	·1155	·1150	·1130	·1133	·1108	·1101	..	·1100	·1105	·1125	·1130
9	..	..	·1145	·1127	·1133	..	·1103	·1112	·1101	·1110	·1129	·1127
10	..	..	·1142	..	·1132	..	·1095	·1096	·1096	·1106	·1123	·1127
11	..	..	·1133	..	·1140	·1126	·1091	·1093	·1101	·1112	·1121	·1127
12	..	·1149	·1132	·1130	·1143	·1150	·1087	·1093	·1106	·1112	·1129	·1127
13	0·1159	·1152	·1135	·1131	·1130	·1123	·1078	..	·1111	·1120	·1123	·1129
14	·1171	·1146	·1138	·1128	·1139	·1135	·1087	·1130	·1101	·1114	·1127	·1129
15	·1171	·1146	·1142	·1138	·1141	·1130	·1096	·1128	·1103	·1108	·1128	·1132
16	·1166	·1152	·1140	·1140	·1137	·1129	·1102	·1104	·1104	·1105	·1125	·1127
17	·1170	·1152	·1144	·1131	·1149	·1128	..	·1108	..	·1106	·1132	·1117
18	·1162	·1157	·1140	·1139	·1147	·1118	·1108	·1093	·1111	·1106	·1133	·1125
19	·1152	·1153	·1147	·1138	·1125	·1119	·1109	·1094	·1110	·1111	·1134	·1135
20	·1150	·1154	·1140	·1144	·1130	·1115	·1107	·1189	·1113	..	·1136	·1135
21	·1166	·1153	·1144	·1140	·1128	·1117	·1102	·1196	..	..	·1131	·1135
22	·1166	..	·1138	·1129	·1139	·1126	·1097	..	·1108	·1124	·1129	·1137
23	·1163	..	·1142	·1127	·1145	·1119	..	..	·1110	·1130	·1124	·1133
24	·1167	·1141	·1139	·1135	·1157	·1122	..	·1091	·1105	·1129	·1123	·1134
25	..	·1146	·1127	·1132	·1148	·1132	..	·1086	·1108	·1116	·1120	..
26	·1155	·1147	·1132	·1132	·1159	·1134	·1112	..	·1109	·1120	·1112	..
27	·1151	·1145	·1127	·1142	·1159	·1132	..	·1089	·1110	·1120	·1119	..
28	·1144	·1145	·1134	·1138	·1157	·1138	·1110	·1091	..	·1128	·1123	..
29	·1148		·1138	·1130	·1147	·1119	·1115	·1094	·1110	·1119	·1124	..
30	·1153		·1137	·1123	·1150	·1126	·1123	·1093	·1111	·1122	·1113	..
31	·1150		..		·1141		·1123	·1090		·1122		..

1851.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	..	0·1150	0·1151	..	0·1151	0·1140	..	..	0·1156	0·1138	0·1160	0·1182
2	..	·1166	·1153	..	·1149	·1139	0·1171	0·1138	·1153	..	·1165	·1183
3	..	·1160	·1149	..	·1165	·1128	·1160	·1133	..	·1128	·1165	·1184
4	..	·1161	·1149	0·1157	..	·1128	·1153	·1134	..	·1142	·1166	·1181
5	..	·1158	·1158	·1148	..	·1117	·1152	·1128	·1142	·1140	·1161	·1187
6	..	·1155	·1157	·1152	·1156	·1114	·1159	..	..	·1149	·1158	..
7	..	·1158	·1164	·1147	·1143	..	·1160	..	..	·1151	·1160	·1165
8	..	·1158	·1161	..	·1132	..	·1165	·1097	·1146	·1156	·1163	..
9	0·1182	·1156	·1163	·1150	·1136	..	·1169	·1098	..	·1150	·1167	..
10	·1180	·1151	·1152	·1147	·1136	·1126	·1169	·1092	·1148	·1149	·1163	·1181
11	·1176	·1152	·1144	..	·1139	·1126	·1163	·1170	·1145	·1145	·1162	·1184
12	·1177	·1149	·1147	·1148	·1148	·1136	·1165	·1162	·1145	·1150	·1162	·1184
13	·1182	·1155	·1149	·1152	·1139	·1133	·1169	·1170	·1142	·1157	·1164	·1189
14	·1178	·1161	·1152	·1150	·1140	·1132	·1161	·1167	·1148	·1156	·1166	·1193
15	·1181	·1153	·1155	·1152	·1143	·1139	·1163	·1166	·1141	·1163	·1168	·1193
16	..	·1167	·1155	·1151	..	·1130	·1145	·1167	·1141	·1164	·1171	·1186
17	·1159	·1159	·1159	·1148	·1157	·1126	·1141	·1162	·1152	·1166	·1171	·1194
18	·1166	..	·1154	..	·1151	·1131	·1132	·1165	·1163	·1157	·1171	·1188
19	..	..	·1155	..	..	·1132	·1148	·1174	·1160	·1158	·1174	·1185
20	·1149	..	·1148	·1143	·1155	·1133	·1152	·1175	·1160	·1147	..	·1188
21	·1151	·1147	·1155	·1142	·1168	·1125	·1140	·1163	·1166	·1161	·1164	·1191
22	·1153	·1159	·1154	·1151	·1164	·1121	·1146	·1174	·1162	·1159	·1162	·1177
23	·1153	·1160	·1155	·1145	·1162	·1114	..	·1175	·1157	·1160	·1164	·1187
24	·1155	·1158	·1151	·1153	·1146	·1113	·1162	·1154	·1156	·1156	·1166	·1189
25	·1159	·1148	·1153	·1160	·1140	·1115	·1153	·1160	..	·1161	..	·1190
26	·1168	·1154	·1156	·1163	·1145	·1117	·1145	·1155	·1163	·1160	·1185	·1193
27	·1156	..	·1156	·1169	·1144	·1107	·1140	·1153	·1157	·1154	·1183	·1181
28	·1150	·1153	..	·1163	·1142	·1092	..	..	·1152	..	·1181	·1177
29	·1146		..	·1162	·1148	·1086	·1137	·1161	..	·1133	·1187	·1160
30	·1153		..	·1159	·1149	..	·1140	·1158	..	·1145	·1189	·1188
31	·1159		..		·1149		·1141	·1159		·1154		·1187

TABLE VII.—MEAN HORIZONTAL MAGNETIC FORCE in each ASTRONOMICAL DAY, &c.—*continued.*

1852.

Days of the Month.	January.	February.	March.	April.	May.	June	July.	August.	September	October.	November	December.
1	0·1189	..	0·1122	0·1121	0·1092	0·1126	0·1134	0·1122	0·1144	..	0·1143	0·1155
2	·1190	0·1126	·1122	·1120	·1087	·1136	·1133	·1131	·1143	0·1147	..	·1155
3	·1189	·1129	..	·1128	·1095	·1133	·1126	·1139	·1143	·1144	·1149	·1156
4	..	·1127	·1125	·1128	·1108	·1121	·1120	·1140	·1141	·1150	·1150	·1157
5	..	·1126	·1127	·1123	·1111	..	·1121	·1139	·1119	..	·1145	·1166
6	·1137	·1126	·1121	·1127	·1111	·1132	·1092	..	·1143	·1148	·1146	..
7	·1140	..	·1120	·1134	·1110	..	·1118	·1134	·1145	·1148	·1153	·1161
8	·1139	..	·1126	·1128	..	·1137	·1122	·1135	..	·1145	·1154	·1159
9	·1139	·1130	·1128	·1134	·1108	·1155	..	..	·1142	·1147	·1162	·1153
10	·1138	·1133	·1128	·1122	·1113	·1158	..	..	·1140	·1152	·1159	·1148
11	·1136	·1136	·1136	·1126	·1106	..	·1137	·1144	..	..	..	·1159
12	·1135	·1135	·1124	·1132	·1104	·1152	·1144	·1143	·1137	·1143	·1141	·1163
13	·1126	·1129	·1133	·1125	·1093	·1152	·1135	·1131	·1140	·1147	·1141	·1159
14	·1130	..	·1138	·1119	·1099	·1163	..	·1134	·1143	·1153	·1153	..
15	·1132	..	·1134	·1114	·1117	·1165	..	·1137	·1145	·1154	·1155	..
16	·1136	·1101	·1137	·1107	·1127	..	·1131	·1140	..	·1150	·1147	·1154
17	·1134	..	·1139	·1102	..	·1144	·1141	·1141	·1130	·1141	·1151	·1153
18	·1141	..	·1142	·1114	..	·1149	·1129	·1141	·1144	..	·1151	·1142
19	..	..	·1147	·1109	..	·1152	·1139	·1141	·1128	·1140	·1157	·1155
20	..	..	·1139	..	..	·1153	·1144	·1146	·1131	·1131	·1158	..
21	·1120	..	·1141	..	·1129	·1148	·1139	·1144	..	·1138	·1164	..
22	·1112	·1113	·1142	·1090	·1126	·1133	·1138	·1141	..	·1143	·1165	·1156
23	·1109	·1117	·1135	..	·1125	·1122	·1141	·1138	·1139	·1148	..	·1151
24	·1123	·1117	·1143	·1106	..	·1138	·1131	·1139	·1153	·1146	·1163	·1147
25	·1118	·1124	·1142	·1109	..	·1140	·1142	·1138	..	·1163	·1162	·1151
26	·1123	·1116	·1128	·1106	·1124	·1135	·1150	·1138	·1115	·1165	·1158	·1158
27	·1127	·1112	·1129	·1107	·1122	·1129	·1141	·1135	·1155	·1153	..	..
28	·1134	·1118	·1133	·1103	..	·1140	·1132	·1139	·1161	·1162	·1180	..
29	·1130	..	·1126	·1118	·1120	·1138	..	·1136	..	·1156	·1166	..
30	·1125		·1129	·1097	·1130	·1134	..	·1145	·1139	·1150	·1165	..
31	·1122		·1120		·1125		·1132	·1142		·1150		..

1853.

Days of the Month.	January.	February.	March.	April.	May.	June	July.	August.	September	October.	November	December.
1	..	0·1130	0·1113	..	0·1140	..	0·1175	0·1149	..	..	0·1165	0·1184
2	..	·1123	·1110	..	..	0·1185	·1172	·1158	..	..	·1172	·1181
3	..	·1129	·1108	..	..	..	·1172	·1156	..	..	·1186	·1183
4	..	·1129	·1105	..	·1147	..	·1174	·1155	0·1115	..	..	..
5	..	·1120	·1106	..	·1130	..	·1179	·1159	·1156	0·1171	·1183	..
6	..	·1122	·1107	..	..	·1182	·1180	·1163	·1145	·1171	·1186	..
7	..	·1121	..	..	·1142	·1171	·1180	·1154	·1152	·1167	·1182	..
8	..	·1125	..	..	·1144	·1188	·1180	·1157	·1155	·1168	·1171	..
9	..	..	·1113	..	·1143	..	·1177	·1152	·1160	·1174	..	..
10	..	·1124	·1113	0·1106	·1144	·1193	·1173	·1154	·1164	·1160	·1170	·1187
11	0·1125	·1124	·1105	..	·1145	·1189	·1171	·1160	·1159	·1164	·1179	·1196
12	·1129	·1123	..	..	·1159	·1189	..	..	·1160	·1167	·1178	·1190
13	·1126	·1130	·1109	·1108	·1160	·1194	·1155	·1172	·1165	·1166	·1183	..
14	..	·1101	..	..	·1155	·1185	·1169	·1162	·1157	·1153	·1186	·1187
15	..	·1112	·1109	·1198	·1163	·1175	·1172	·1165	·1165	·1162	·1187	·1188
16	..	·1106	..	..	·1160	·1177	·1170	·1177	·1164	·1170	·1184	..
17	..	..	·1117	·1217	·1159	·1180	·1170	·1159	·1164	·1169	·1176	..
18	..	..	·1112	·1200	..	·1187	·1167	·1209	·1155	·1168	·1174	..
19	..	·1118	·1120	·1196	·1180	·1181	·1167	..	..	·1171	·1179	..
20	·1132	·1121	..	·1197	..	·1183	·1165	..	·1155	·1171	·1188	·1188
21	·1131	..	·1122	·1199	·1178	·1182	·1118	..	·1158	·1175	..	..
22	·1135	·1104	·1118	·1199	·1183	..	·1115	..	·1159	·1166	..	·1184
23	·1142	·1107	·1119	..	·1194	·1173	..	·1159	·1143	·1161	·1136	·1184
24	·1134	·1107	·1115	·1134	..	·1171	·1108	·1149	..	·1163	..	..
25	·1133	..	·1119	·1143	·1173	·1179	..	·1156	·1157	..	..	·1194
26	·1132	·1113	..	·1142	·1180	·1186	..	·1158	..	·1163	·1185	·1190
27	..	·1118	..	·1140	·1191	·1176	·1160	..	..	·1166	·1191	..
28	·1127	..	..	·1143	..	·1174	..	·1151	..	·1166	..	..
29	·1128		·1119	·1143	·1196	·1174	..	..	..	·1169	·1183	..
30	·1131		..	·1141	·1192	·1175	..	..	·1138	..	·1178	·1203
31	·1182		..		·1198		·1153	·1132		..		..

TABLE VII.—MEAN HORIZONTAL MAGNETIC FORCE on each ASTRONOMICAL DAY, &c.—*continued.*

1854.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	..	0·1142	0·1153	..	0·1146	0·1139	0·1157	0·1154	..	..	0·1175	0·1180
2	..	..	·1158	0·1168	·1147	..	·1150	·1159	0·1148	..	·1177	·1183
3	..	..	·1159	·1168	·1142	..	·1147	..	·1143	..	·1181	·1192
4	..	·1137	·1167	·1166	·1134	·1147	·1144	·1168	·1133	..	·1181	·1194
5	..	·1136	·1171	·1166	·1134	·1143	·1145	..	·1151	..	·1183	·1193
6	..	..	·1159	·1170	·1141	·1147	·1152	..	·1139	..	·1180	·1195
7	0·1152	..	·1158	·1173	·1144	..	·1159	..	·1143	..	·1179	·1203
8	..	·1138	·1161	·1168	·1139	·1145	·1155	..	·1143	0·1148	·1170	·1205
9	·1138	..	·1155	·1170	·1133	·1148	·1153	..	·1143	·1168	..	·1205
10	·1141	·1124	·1161	..	·1134	·1142	·1145	·1155	..	·1173	·1179	·1244
11	·1139	·1122	·1160	..	·1135	·1151	·1146	·1156	..	·1177	·1183	..
12	·1135	·1133	·1159	·1161	·1134	·1144	·1157	·1167	..	·1167	·1186	·1210
13	·1140	·1131	·1152	·1170	·1134	·1140	·1150	..	·1158	·1179	·1183	·1202
14	·1138	·1127	·1162	·1164	·1134	·1140	·1157	·1165	·1159	·1178	..	·1201
15	·1144	·1131	..	·1173	·1131	·1144	·1157	·1170	·1153	..	·1178	·1203
16	·1137	..	..	·1187	·1142	·1145	·1147	·1167	..	·1176	·1183	·1207
17	·1136	..	·1167	·1191	·1128	·1139	·1145	..	·1144	·1184	·1183	·1212
18	·1140	·1152	·1183	·1193	·1147	·1139	·1148	..	..	·1178	·1188	·1207
19	·1137	·1168	·1182	·1177	·1128	..	·1149	..	·1162	·1178	·1191	·1208
20	·1135	·1161	·1177	..	·1136	·1149	·1154	·1156	·1165	·1180	·1189	·1204
21	·1137	·1161	·1188	..	·1141	·1152	·1150	·1160	·1159	·1180	·1185	·1208
22	·1147	..	..	·1150	·1147	·1158	·1148	·1156	..	·1178	·1183	·1205
23	·1136	·1163	·1183	..	·1152	·1150	..	·1161	·1167	·1183	·1185	·1205
24	·1138	..	·1187	·1137	·1149	·1149	..	·1157	·1163	·1175	·1182	·1209
25	·1142	..	·1182	·1142	..	·1150	..	..	·1157	·1174	·1184	·1204
26	·1142	·1151	·1177	·1149	·1145	·1153	·1151	..	·1162	·1177	..	·1207
27	·1143	·1151	·1125	·1141	·1150	·1149	..	..	·1159	..	..	·1210
28	·1140	·1156	..	·1138	·1149	·1153	..	·1152	·1157	·1177	·1177	·1208
29	·1137		·1119	·1135	·1146	..	..	..	·1163	·1182	·1178	·1207
30	·1131		·1130	·1140	·1144	·1153	·1152	·1163	..	·1179	·1183	·1198
31	·1138		·1125		·1138		·1152	·1150		·1183		·1201

1855.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	..	0·1172	0·1128	0·1152	..	0·1154	..	0·1147	..	..	..	..
2	..	·1181	..	·1151	0·1126	..	..	..	..	0·1157	..	0·1126
3	0·1136	·1171	..	..	·1127	..	..	..	..	·1140	..	·1121
4	·1137	·1167	·1131	..	·1134	..	..	..	..	·1141	0·1131	·1115
5	·1133	·1170	..	·1131	·1134	..	..	·1143	..	..	..	·1124
6	·1137	·1173	·1133	·1141	·1137	..	..	..	0·1156	·1138	·1136	·1123
7	..	·1174	·1135	..	·1137	..	..	..	..	·1141	·1129	·1123
8	..	·1164	·1142	·1152	·1130	..	0·1146	·1150	·1132	·1148	..	·1130
9	·1144	·1163	·1132	·1153	·1124	..	·1153	·1153	·1143	·1150	·1128	..
10	·1150	·1169	·1144	·1151	..	·1159	..	..	..	·1148	·1133	·1130
11	·1153	·1170	·1147	·1157	..	·1150	·1178	..	..	·1147	·1132	·1132
12	·1152	·1124	..	..	·1130	..	..	..	·1138	·1151	·1132	·1122
13	·1154	..	·1128	..	·1140	..	..	..	·1149	..	..	·1129
14	·1163	..	·1135	·1149	..	·1171	..	..	·1148	..	..	·1124
15	·1163	..	·1132	·1143	·1127	..	..	..	·1145	..	·1137	·1125
16	·1161	·1170	·1134	·1141	·1123	·1163	..	..	·1144	·1144	·1128	·1126
17	·1172	..	·1149	·1134	·1120	·1166	·1164	..	·1141	..	·1124	·1117
18	..	·1151	·1139	·1128	..	..	·1153	..	·1135	..	·1130	..
19	·1170	·1143	·1138	·1121	..	..	..	..	..	·1142	·1129	..
20	·1173	·1142	·1136	·1123	..	·1166	..	..	..	..	·1133	..
21	·1174	·1130	..	·1133	..	·1161	..	..	·1136	·1148	·1125	..
22	·1164	·1126	..	·1136	·1130	..	·1160	·1154	·1137	..	..	..
23	·1170	·1125	·1138	·1131	..	..	..	·1160	·1141	..	·1125	..
24	·1163	·1122	..	..	..	..	·1158	..	·1146	·1146	·1132	·1125
25	·1162	·1126	·1143	·1150	·1156	..	·1156	..	·1154	·1153	·1136	·1133
26	·1159	·1127	·1138	·1143	..	·1171	..	·1157	·1160	·1155	..	·1130
27	·1163	·1131	·1143	·1139	·1155	..	..	·1159	..	·1150	·1126	..
28	·1168	·1123	·1140	·1149	..	·1156	..	·1151	·1153	·1135	..	..
29	·1164		·1139	..	..	..	..	..	·1155	·1155	..	·1126
30	·1165		·1144	·1141	..	..	..	..	·1156	·1161	·1109	·1117
31	·1165		·1148		·1160		..	·1146		·1158		..

TABLE VII.—MEAN HORIZONTAL MAGNETIC FORCE on each ASTRONOMICAL DAY, &c.—*concluded.*

1856.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	..	0·1154	..	0·1125	..	0·1160	..	0·1168	..	..	..	0·1196
2	..	..	0·1145	·1133	0·1159	·1157	..	·1171	0·1167	..	..	·1120
3	..	..	·1149	·1147	·1161	..	..	..	..	..	..	·1176
4	..	·1156	·1151	·1142	·1160	..	..	·1168	..	..	..	·1193
5	..	·1156	·1151	..	..	..	..	·1170	·1161	..	0·1177	·1187
6	0·1129	·1152	·1142	..	..	·1212	..	·1168	·1158	..	..	·1200
7	·1123	·1147	..	..	..	..	..	·1163	·1163	..	..	·1195
8	·1125	·1149	·1146	·1165	..	..	0·1163	·1184	..	..	·1175	·1188
9	..	·1146	·1144	·1161	·1178	..	..	..	·1169	..	·1180	..
10	·1132	·1152	·1139	·1157	..	..	·1154	·1168	..	..	·1175	..
11	·1136	·1133	..	·1157	..	..	·1163	·1180	..	..	·1182	..
12	·1139	·1135	..	·1154	·1179	..	·1160	·1190	..	..	..	..
13	·1138	..	·1139	..	·1181	..	·1159	·1161	..	..	·1174	..
14	·1135	..	·1136	..	·1184	..	·1166	·1169	..	..	·1177	..
15	·1134	·1145	·1136	·1161	·1179	..	·1165	..	..	0·1223	..	..
16	·1134	·1145	·1141	·1162	·1192	..	·1166	·1179	..	·1225	·1196	·1202
17	·1135	·1150	·1140	·1164	..	..	·1166	..	..	..	·1198	·1191
18	·1134	·1151	..	·1161	..	..	·1176	·1179	..	·1226	·1209	·1193
19	·1135	·1156	..	·1156	..	..	·1166	·1180	..	·1229	·1207	·1192
20	·1133	·1143	..	·1154	1197	·1158	..	·1180	..	..	·1203	·1192
21	·1136	·1153	·1143	·1154	..	·1161	·1172	·1180	..	..	..	..
22	·1141	·1159	·1134	·1153	·1172	·1159	·1169	·1174	..	..	·1208	..
23	·1141	·1157	·1143	·1142	..	·1165	..	..	..	·1218	·1206	·1195
24	·1136	..	·1137	·1158	·1161	..	..	..	..	..	·1208	·1192
25	·1139	·1159	·1138	·1163	·1149	·1165	·1175	·1165	..	..	·1207	·1196
26	·1136	·1161	·1139	·1165	..	..	·1173	·1172	..	·1223	·1204	·1192
27	·1149	..	·1125	·1177	..	·1170	·1173	·1169	..	..	·1196	·1198
28	·1142	..	·1133	·1167	·1154	·1165	·1167	..	..	..	·1199	..
29	·1150	..	·1134	·1168	..	·1160	·1168	·1169	..	..	·1200	..
30	·1149		·1138	·1166	·1152	·1159	·1167	..	..	..	·1210	..
31	·1150		·1130		..		·1150	·1169		·1182		..

1857.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	..	0·1234	0·1233	..	..	..	0·1248	0·1226	0·1226	0·1233	0·1256	0·1285
2	..	..	·1231	·01238	0·1198	0·1221	·1227	·1220	·1238	·1230	..	..
3	..	..	·1231	·1241	·1201	..	·1224	..	..	..	..	·1280
4	0·1193	..	·1260	·1243	·1199	..	·1226	·1223	..	..	·1268	·1278
5	·1185	..	·1243	·1236	·1207	..	..	·1230	·1218	..	·1270	..
6	·1195	·1228	·1239	·1235	·1211	..	·1222	·1222	·1224	..	..	·1278
7	·1188	..	·1234	·1232	..	..	·1218	·1229	·1218	·1249	·1280	·1276
8	..	·1225	·1237	·1236	..	..	..	..	·1225	..	·1287	..
9	..	·1227	·1245	·1239	..	..	·1218	..	·1221	·1244	..	·1276
10	·1195	·1226	..	·1236	..	·1222	·1227	..	..	..	..	..
11	·1189	·1232	·1240	·1224	..	·1220	..	·1229	·1217	..	..	..
12	·1179	·1234	·1242	·1228	..	·1219	..	..	·1218	..	..	..
13	·1185	·1234	·1240	·1236	..	..	..	..	..	..	..	·1278
14	..	·1238	..	..	..	·1208	·1228	·1228	..	..	·1271	·1270
15	·1191	..	..	·1241	..	..	·1213	·1231	·1215	..	·1268	·1278
16	..	..	..	·1240	..	·1215	·1218	·1210	·1217	·1248	·1265	..
17	·1182	..	·1214	..	..	·1215	..	..	·1218	·1241	..	..
18	·1193	·1230	..	..	..	·1224	·1215	·1228	..	..	·1250	·1247
19	·1189	·1227	·1225	·1207	..	..	·1206	·1229	·1231	·1260	·1261	..
20	·1192	·1233	·1225	..	..	·1224	·1210	·1230	·1250	·1242	·1263	..
21	..	·1231	·1231	·1206	..	·1219	·1227	·1232	..	..	..	..
22	..	·1230	·1234	·1213	..	·1221	·1228	·1224	·1233	..	·1269	·1266
23	·1196	·1233	·1230	·1210	..	..	..	..	·1235	..	..	·1253
24	·1196	·1236	·1227	·1206	..	·1204	..	·1221	..	·1243	·1260	..
25	·1192	..	·1231	·1206	..	..	·1212	·1216	..	·1242	·1262	..
26	·1191	..	·1234	·1216	..	·1214	·1222	·1226	·1236	·1235	..	..
27	·1204	..	·1233	·1198	..	..	·1228	·1223	·1242	·1243	·1268	·1260
28	..	..	·1234	·1205	..	·1217	·1226	·1230	..	·1264	·1270	..
29	..		·1233	·1194	..	..	..	·1237	..	..	·1272	..
30	·1220		·1226	·1195	..	·1240	·1224	·1218	..	..	..	..
31	..		·1233		..		..	..		..		..

Table VIII.—Mean Horizontal Magnetic Force (diminished by a constant 0·8850 nearly) in each Month, as deduced from the mean of the Mean Daily Determinations in each Month; and Mean Horizontal Magnetic Force in each Year, as deduced from the mean of the Mean Monthly Determinations; all corrected for Temperature. Showing the apparent Monthly Change of Horizontal Force in each Year.

Month.	1848.	1849.	1850.	1851.	1852.	1853.
January	0·1119	0·1139	0·1159	0·1151	0·1137	0·1131
February	·1125	·1139	·1150	·1156	·1125	·1117
March	·1134	·1144	·1138	·1155	·1132	·1114
April	·1144	·1152	·1134	·1152	·1116	·1146
May	·1194	·1136	·1139	·1148	·1114	·1165
June	·1211	·1136	·1127	·1120	·1141	·1181
July	·1047	·1134	·1105	·1154	·1134	·1159
August	·1071	·1130	·1103	·1150	·1139	·1159
September	·1091	·1128	·1105	·1151	·1142	·1152
October	·1098	·1126	·1114	·1152	·1149	·1166
November	·1119	·1128	·1125	·1169	·1157	·1181
December	·1121	·1130	·1125	·1184	·1155	·1187
Mean		0·1135	0·1127	0·1154	0·1137	0·1154

Month.	1854.	1855.	1856.	1857.	Mean for the Nine Years 1849 to 1857.	Mean, corrected for Secular Variation, 0·0022 annually.
January	0·1140	0·1156	0·1135	0·1195	0·1151	0·1151
February	·1143	·1152	·1152	·1231	·1152	·1150
March	·1163	·1139	·1141	·1234	·1151	·1147
April	·1161	·1142	·1157	·1223	·1155	·1149
May	·1140	·1133	·1171	·1208	·1150	·1143
June	·1147	·1164	·1171	·1218	·1156	·1147
July	·1151	·1158	·1166	·1222	·1154	·1143
August	·1156	·1151	·1171	·1226	·1154	·1141
September	·1153	·1146	·1161	·1226	·1152	·1137
October	·1178	·1148	·1218	·1244	·1166	·1149
November	·1182	·1131	·1192	·1268	·1170	·1152
December	·1202	·1124	·1195	·1271	·1175	·1155
Mean	0·1160	0·1145	0·1169	0·1230		

TABLE IX.—MEAN MONTHLY DETERMINATION of the HORIZONTAL MAGNETIC FORCE (diminished by a constant 0·8850 nearly), corrected for Temperature, at every HOUR of the DAY; obtained by taking the MEAN of all the DETERMINATIONS at the same HOUR of the DAY through each MONTH.

1848.

Hour. Gottingen Mean Solar Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
0	0·1109	0·1113	0·1117	0·1121	0·1176	0·1195	0·1021	0·1051	0·1072	0·1080	0·1109	0·1113
1	·1111	·1109	·1122	·1126	·1179	·1200	·1030	·1055	·1079	·1083	·1112	·1114
2	·1114	·1114	·1127	·1131	·1185	·1204	·1038	·1060	·1086	·1088	·1117	·1119
3	·1120	·1117	·1133	·1140	·1191	·1209	·1047	·1068	·1091	·1094	·1120	·1120
4	·1118	·1120	·1132	·1144	·1193	·1213	·1054	·1074	·1094	·1098	·1120	·1118
5	·1120	·1123	·1134	·1148	·1201	·1217	·1057	·1080	·1096	·1098	·1120	·1119
6	·1124	·1127	·1136	·1153	·1205	·1221	·1059	·1082	·1096	·1102	·1120	·1120
7	·1117	·1128	·1139	·1152	·1206	·1223	·1063	·1085	·1099	·1102	·1119	·1123
8	·1118	·1128	·1139	·1151	·1206	·1223	·1063	·1084	·1100	·1104	·1123	·1120
9	·1120	·1129	·1139	·1151	·1201	·1222	·1061	·1081	·1097	·1102	·1119	·1120
10	·1117	·1128	·1140	·1149	·1199	·1217	·1058	·1079	·1098	·1104	·1121	·1121
11	·1117	·1128	·1140	·1147	·1196	·1217	·1056	·1078	·1098	·1102	·1118	·1121
12	·1119	·1129	·1139	·1149	·1198	·1216	·1053	·1079	·1097	·1102	·1120	·1122
13	·1119	·1128	·1138	·1150	·1196	·1215	·1050	·1078	·1097	·1100	·1117	·1122
14	·1119	·1128	·1138	·1149	·1196	·1216	·1054	·1076	·1096	·1101	·1119	·1120
15	·1119	·1127	·1138	·1150	·1198	·1215	·1049	·1076	·1096	·1101	·1121	·1120
16	·1122	·1129	·1139	·1150	·1196	·1216	·1051	·1077	·1096	·1102	·1120	·1121
17	·1123	·1129	·1140	·1149	·1198	·1216	·1052	·1075	·1097	·1104	·1124	·1124
18	·1124	·1131	·1141	·1151	·1197	·1215	·1049	·1073	·1094	·1104	·1123	·1125
19	·1125	·1131	·1139	·1148	·1194	·1211	·1044	·1070	·1092	·1103	·1124	·1127
20	·1124	·1132	·1136	·1143	·1192	·1205	·1035	·1062	·1088	·1100	·1120	·1126
21	·1118	·1127	·1129	·1136	·1188	·1200	·1026	·1057	·1079	·1093	·1116	·1123
22	·1114	·1121	·1123	·1132	·1179	·1196	·1024	·1054	·1072	·1087	·1114	·1118
23	·1111	·1118	·1118	·1127	·1177	·1194	·1022	·1050	·1070	·1084	·1110	·1115

1849.

0	0·1128	0·1125	0·1127	0·1132	0·1121	0·1121	0·1115	0·1117	0·1114	0·1113	0·1121	0·1123
1	·1131	·1127	·1131	·1134	·1123	·1121	·1125	·1123	·1119	·1116	·1123	·1128
2	·1136	·1132	·1137	·1142	·1127	·1138	·1129	·1127	·1126	·1121	·1124	·1129
3	·1138	·1139	·1141	·1150	·1133	·1136	·1136	·1132	·1130	·1125	·1126	·1131
4	·1138	·1141	·1144	·1154	·1139	·1141	·1140	·1133	·1129	·1127	·1128	·1130
5	·1139	·1142	·1147	·1157	·1143	·1146	·1146	·1134	·1131	·1128	·1129	·1131
6	·1142	·1144	·1150	·1162	·1150	·1146	·1145	·1137	·1131	·1129	·1132	·1132
7	·1141	·1144	·1150	·1161	·1152	·1149	·1145	·1136	·1130	·1129	·1132	·1132
8	·1141	·1140	·1150	·1163	·1149	·1147	·1145	·1136	·1130	·1131	·1131	·1131
9	·1140	·1138	·1149	·1158	·1144	·1145	·1142	·1137	·1130	·1127	·1131	·1130
10	·1140	·1138	·1149	·1158	·1142	·1143	·1142	·1136	·1131	·1130	·1130	·1131
11	·1140	·1138	·1149	·1158	·1141	·1141	·1141	·1135	·1135	·1128	·1128	·1130
12	·1139	·1139	·1147	·1157	·1139	·1140	·1140	·1134	·1134	·1130	·1127	·1130
13	·1139	·1138	·1148	·1156	·1140	·1139	·1137	·1134	·1133	·1130	·1125	·1131
14	·1140	·1140	·1147	·1158	·1140	·1139	·1137	·1132	·1133	·1128	·1128	·1130
15	·1142	·1140	·1148	·1157	·1140	·1139	·1137	·1133	·1132	·1127	·1130	·1131
16	·1142	·1142	·1149	·1157	·1138	·1139	·1136	·1132	·1134	·1130	·1130	·1131
17	·1143	·1142	·1150	·1159	·1139	·1140	·1136	·1133	·1131	·1128	·1131	·1133
18	·1144	·1146	·1150	·1159	·1138	·1137	·1134	·1131	·1131	·1130	·1132	·1134
19	·1145	·1146	·1149	·1157	·1134	·1134	·1131	·1128	·1127	·1130	·1133	·1135
20	·1144	·1144	·1147	·1147	·1127	·1127	·1123	·1124	·1124	·1127	·1130	·1133
21	·1139	·1139	·1138	·1141	·1124	·1122	·1117	·1116	·1120	·1119	·1126	·1131
22	·1133	·1134	·1131	·1134	·1120	·1119	·1115	·1118	·1120	·1114	·1121	·1128
23	·1130	·1131	·1126	·1127	·1118	·1118	·1113	·1116	·1124	·1113	·1119	·1126

TABLE IX.—MEAN MONTHLY DETERMINATION of the HORIZONTAL MAGNETIC FORCE, &c.—*continued*.

1850.

Hour. Göttingen Mean Solar Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
0	0·1131	0·1135	0·1126	0·1114	0·1125	0·1117	0·1092	0·1090	0·1086	0·1098	0·1113	0·1116
1	·1155	·1139	·1129	·1119	·1129	·1124	·1097	·1096	·1093	·1102	·1117	·1120
2	·1158	·1144	·1136	·1126	·1135	·1127	·1104	·1102	·1102	·1105	·1119	·1120
3	·1163	·1150	·1143	·1132	·1141	·1126	·1107	·1107	·1102	·1109	·1119	·1121
4	·1163	·1152	·1144	·1139	·1144	·1129	·1110	·1108	·1104	·1110	·1121	·1120
5	·1162	·1153	·1143	·1141	·1148	·1131	·1112	·1111	·1105	·1113	·1122	·1122
6	·1161	·1154	·1144	·1143	·1150	·1134	·1115	·1111	·1108	·1117	·1125	·1125
7	·1161	·1155	·1143	·1142	·1150	·1133	·1113	·1112	·1108	·1116	·1125	·1126
8	·1161	·1159	·1142	·1142	·1148	·1135	·1113	·1111	·1110	·1116	·1127	·1125
9	·1159	·1154	·1141	·1139	·1144	·1130	·1109	·1109	·1110	·1118	·1127	·1125
10	·1158	·1153	·1142	·1140	·1143	·1129	·1107	·1109	·1110	·1119	·1129	·1126
11	·1159	·1153	·1141	·1138	·1142	·1127	·1106	·1106	·1111	·1120	·1127	·1125
12	·1159	·1150	·1142	·1135	·1141	·1128	·1104	·1106	·1112	·1110	·1127	·1126
13	·1160	·1149	·1140	·1135	·1142	·1126	·1105	·1108	·1112	·1119	·1128	·1127
14	·1159	·1152	·1140	·1135	·1142	·1125	·1107	·1105	·1112	·1120	·1129	·1128
15	·1160	·1151	·1139	·1136	·1042	·1126	·1106	·1106	·1111	·1120	·1130	·1128
16	·1161	·1151	·1141	·1136	·1142	·1127	·1107	·1106	·1112	·1121	·1131	·1130
17	·1160	·1152	·1142	·1135	·1141	·1128	·1109	·1106	·1111	·1121	·1132	·1130
18	·1163	·1153	·1142	·1138	·1141	·1129	·1107	·1104	·1109	·1123	·1134	·1131
19	·1161	·1154	·1144	·1138	·1141	·1134	·1106	·1102	·1109	·1123	·1133	·1133
20	·1161	·1153	·1141	·1134	·1136	·1131	·1103	·1096	·1103	·1120	·1131	·1132
21	·1158	·1147	·1134	·1127	·1131	·1125	·1096	·1091	·1096	·1111	·1128	·1128
22	·1154	·1142	·1124	·1119	·1125	·1122	·1092	·1089	·1090	·1104	·1120	·1119
23	·1150	·1137	·1122	·1115	·1124	·1118	·1089	·1088	·1086	·1099	·1115	·1115

1851.

0	0·1142	0·1146	0·1143	0·1134	0·1130	0·1104	0·1140	0·1140	0·1143	0·1139	0·1163	0·1181
1	·1141	·1145	·1145	·1137	·1134	·1109	·1145	·1142	·1150	·1142	·1163	·1184
2	·1146	·1150	·1148	·1141	·1138	·1112	·1147	·1149	·1152	·1145	·1167	·1184
3	·1146	·1149	·1150	·1146	·1142	·1118	·1150	·1152	·1153	·1151	·1168	·1184
4	·1146	·1151	·1152	·1149	·1144	·1120	·1153	·1154	·1152	·1152	·1166	·1181
5	·1147	·1151	·1151	·1153	·1150	·1123	·1155	·1151	·1153	·1153	·1167	·1178
6	·1147	·1154	·1153	·1156	·1155	·1126	·1159	·1153	·1153	·1153	·1167	·1181
7	·1149	·1155	·1153	·1157	·1157	·1129	·1161	·1155	·1152	·1153	·1169	·1181
8	·1148	·1157	·1155	·1156	·1154	·1129	·1161	·1153	·1154	·1153	·1169	·1181
9	·1150	·1156	·1155	·1156	·1153	·1126	·1161	·1154	·1156	·1155	·1168	·1181
10	·1152	·1156	·1156	·1156	·1153	·1125	·1158	·1155	·1155	·1155	·1169	·1184
11	·1153	·1156	·1158	·1156	·1154	·1125	·1158	·1155	·1156	·1153	·1169	·1182
12	·1152	·1158	·1157	·1157	·1152	·1125	·1157	·1155	·1158	·1155	·1171	·1181
13	·1151	·1156	·1157	·1157	·1152	·1125	·1156	·1153	·1155	·1154	·1171	·1182
14	·1153	·1159	·1159	·1156	·1152	·1125	·1155	·1152	·1155	·1154	·1171	·1184
15	·1154	·1159	·1159	·1156	·1154	·1125	·1158	·1154	·1156	·1155	·1171	·1180
16	·1155	·1162	·1159	·1158	·1157	·1125	·1157	·1155	·1155	·1156	·1171	·1187
17	·1158	·1164	·1162	·1160	·1156	·1125	·1159	·1154	·1156	·1156	·1173	·1189
18	·1159	·1164	·1161	·1161	·1156	·1123	·1157	·1152	·1154	·1156	·1174	·1192
19	·1159	·1165	·1162	·1162	·1152	·1122	·1157	·1150	·1153	·1156	·1173	·1192
20	·1158	·1164	·1161	·1159	·1148	·1115	·1152	·1145	·1149	·1155	·1173	·1191
21	·1156	·1161	·1156	·1151	·1143	·1112	·1148	·1142	·1144	·1150	·1168	·1190
22	·1154	·1158	·1149	·1141	·1137	·1107	·1145	·1140	·1139	·1144	·1167	·1188
23	·1147	·1150	·1144	·1136	·1131	·1104	·1142	·1138	·1137	·1140	·1167	·1184

TABLE IX.—MEAN MONTHLY DETERMINATION of the HORIZONTAL MAGNETIC FORCE, &c.—*continued.*

1852.

Hour. Göttingen Mean Solar Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
0	0·1130	0·1113	0·1116	0·1096	0·1096	0·1125	0·1123	0·1125	0·1129	0·1134	0·1146	0·1148
1	·1128	·1115	·1119	·1104	·1101	·1127	·1123	·1128	·1133	·1139	·1148	·1147
2	·1130	·1116	·1125	·1111	·1104	·1125	·1126	·1128	·1137	·1142	·1149	·1147
3	·1131	·1119	·1131	·1116	·1110	·1139	·1129	·1136	·1141	·1144	·1153	·1151
4	·1132	·1120	·1134	·1118	·1113	·1140	·1130	·1136	·1141	·1144	·1154	·1149
5	·1132	·1122	·1137	·1121	·1118	·1142	·1134	·1138	·1142	·1146	·1157	·1155
6	·1133	·1124	·1137	·1124	·1121	·1146	·1138	·1140	·1146	·1148	·1158	·1153
7	·1134	·1125	·1135	·1123	·1122	·1149	·1136	·1144	·1147	·1149	·1158	·1155
8	·1134	·1128	·1136	·1123	·1123	·1149	·1137	·1145	·1146	·1150	·1158	·1154
9	·1135	·1129	·1135	·1121	·1121	·1146	·1134	·1144	·1148	·1153	·1158	·1154
10	·1137	·1125	·1134	·1119	·1119	·1145	·1135	·1144	·1147	·1154	·1158	·1156
11	·1136	·1125	·1135	·1121	·1121	·1147	·1138	·1145	·1146	·1153	·1158	·1156
12	·1137	·1127	·1136	·1123	·1119	·1147	·1138	·1143	·1148	·1155	·1161	·1155
13	·1139	·1124	·1134	·1121	·1120	·1146	·1141	·1144	·1149	·1153	·1159	·1156
14	·1141	·1127	·1135	·1121	·1119	·1136	·1142	·1144	·1146	·1154	·1159	·1158
15	·1142	·1127	·1136	·1118	·1119	·1146	·1139	·1143	·1145	·1153	·1160	·1156
16	·1142	·1127	·1137	1120	·1118	·1147	·1141	·1145	·1146	·1156	·1161	·1158
17	·1142	·1129	·1137	·1120	·1118	·1146	·1144	·1144	·1147	·1157	·1161	·1160
18	·1146	·1132	·1138	·1122	·1119	·1148	·1143	·1142	·1145	·1157	·1164	·1162
19	·1145	·1133	·1137	·1120	·1116	·1144	·1142	·1141	·1144	·1155	·1164	·1162
20	·1146	·1133	·1135	·1116	·1110	·1139	·1133	·1136	·1142	·1150	·1162	·1161
21	·1143	·1130	·1130	·1108	·1106	·1133	·1126	·1130	·1136	·1144	·1158	·1160
22	·1138	·1120	·1122	·1100	·1101	·1128	·1122	·1127	·1132	·1138	·1153	·1156
23	·1129	·1116	·1117	·1097	·1096	·1125	·1120	·1126	·1128	·1134	·1148	·1151

1853.

Hour. Göttingen Mean Solar Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
0	0·1124	0·1110	0·1102	0·1139	0·1150	0·1168	0·1149	0·1146	0·1145	0·1154	0·1173	0·1182
1	·1122	·1109	·1104	·1141	·1153	·1170	·1155	·1151	·1149	·1156	·1173	·1182
2	·1124	·1111	·1106	·1141	·1156	·1175	·1154	·1154	·1152	·1159	·1175	·1181
3	·1125	·1114	·1108	·1144	·1162	·1181	·1160	·1156	·1154	·1162	·1175	·1180
4	·1125	·1114	·1112	·1143	·1166	·1185	·1164	·1158	·1156	·1163	·1176	·1179
5	·1127	·1114	·1114	·1148	·1171	·1187	·1165	·1159	·1155	·1165	·1178	·1179
6	·1129	·1115	·1114	·1150	·1172	·1191	·1169	·1163	·1156	·1164	·1179	·1181
7	·1129	·1117	·1115	·1150	·1174	·1192	·1172	·1164	·1159	·1164	·1179	·1184
8	·1129	·1117	·1116	·1148	·1172	·1191	·1171	·1164	·1157	·1167	·1179	·1182
9	·1130	·1116	·1117	·1146	·1167	·1192	·1167	·1164	·1158	·1168	·1178	·1183
10	·1132	·1116	·1119	·1148	·1171	·1192	·1165	·1164	·1156	·1167	·1177	·1184
11	·1130	·1118	·1116	·1149	·1170	·1187	·1162	·1163	·1157	·1168	·1180	·1185
12	·1132	·1117	·1117	·1148	·1170	·1186	·1162	·1164	·1155	·1168	·1181	·1186
13	·1130	·1118	·1116	·1147	·1169	·1186	·1161	·1162	·1154	·1168	·1181	·1188
14	·1133	·1119	·1117	·1149	·1169	·1184	·1160	·1163	·1155	·1169	·1182	·1187
15	·1134	·1119	·1117	·1150	·1169	·1184	·1159	·1164	·1154	·1170	·1184	·1191
16	·1135	·1120	·1119	·1150	·1168	·1183	·1161	·1166	·1156	·1171	·1185	·1192
17	·1137	·1123	·1120	·1149	·1169	·1184	·1160	·1162	·1155	·1172	·1186	·1194
18	·1138	·1124	·1122	·1151	·1167	·1182	·1159	·1163	·1153	·1173	·1189	·1198
19	·1138	·1126	·1120	·1149	·1165	·1182	·1157	·1163	·1153	·1172	·1189	·1199
20	·1139	·1124	·1117	·1148	·1162	·1175	·1152	·1158	·1150	·1170	·1189	·1199
21	·1137	·1120	·1113	·1145	·1159	·1167	·1147	·1154	·1143	·1167	·1188	·1197
22	·1134	·1122	·1110	·1135	·1157	·1161	·1145	·1150	·1140	·1160	·1180	·1191
23	·1129	·1114	·1105	·1131	·1152	·1162	·1146	·1148	·1139	·1155	·1176	·1183

TABLE IX.—MEAN MONTHLY DETERMINATION of the HORIZONTAL MAGNETIC FORCE, &c.—*continued.*

1854.

Hour. Göttingen Mean Solar Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
0	0·1135	0·1136	0·1155	0·1151	0·1131	0·1137	0·1137	0·1148	0·1142	0·1171	0·1176	0·1199
1	·1135	·1135	·1158	·1155	·1133	·1141	·1143	·1151	·1146	·1172	·1175	·1201
2	·1137	·1137	·1158	·1157	·1136	·1142	·1147	·1153	·1147	·1172	·1175	·1201
3	·1138	·1134	·1161	·1156	·1141	·1146	·1152	·1155	·1150	·1174	·1176	·1200
4	·1135	·1137	·1162	·1160	·1141	·1148	·1153	·1155	·1148	·1174	·1177	·1198
5	·1133	·1139	·1162	·1164	·1145	·1151	·1154	·1154	·1147	·1172	·1178	·1197
6	·1136	·1141	·1162	·1164	·1148	·1152	·1154	·1155	·1148	·1174	·1179	·1198
7	·1138	·1143	·1163	·1166	·1149	·1154	·1157	·1156	·1151	·1174	·1180	·1199
8	·1138	·1143	·1163	·1162	·1148	·1155	·1156	·1155	·1152	·1176	·1180	·1199
9	·1138	·1143	·1163	·1161	·1144	·1152	·1153	·1155	·1154	·1175	·1180	·1202
10	·1139	·1142	·1164	·1160	·1142	·1151	·1155	·1156	·1155	·1177	·1184	·1202
11	·1140	·1144	·1164	·1161	·1142	·1151	·1152	·1157	·1157	·1178	·1184	·1202
12	·1141	·1145	·1165	·1162	·1142	·1149	·1155	·1158	·1158	·1178	·1184	·1201
13	·1142	·1147	·1164	·1162	·1142	·1149	·1154	·1157	·1158	·1178	·1183	·1202
14	·1142	·1148	·1164	·1162	·1141	·1150	·1156	·1160	·1157	·1181	·1184	·1203
15	·1141	·1147	·1167	·1163	·1144	·1150	·1155	·1160	·1158	·1181	·1186	·1205
16	·1142	·1146	·1167	·1165	·1142	·1148	·1155	·1160	·1159	·1184	·1188	·1205
17	·1146	·1149	·1168	·1165	·1143	·1148	·1156	·1162	·1160	·1184	·1189	·1207
18	·1146	·1149	·1168	·1166	·1142	·1147	·1155	·1162	·1160	·1185	·1189	·1208
19	·1149	·1153	·1170	·1167	·1142	·1145	·1154	·1161	·1159	·1185	·1190	·1209
20	·1147	·1150	·1168	·1164	·1137	·1145	·1149	·1158	·1157	·1186	·1189	·1208
21	·1143	·1150	·1161	·1160	·1135	·1138	·1145	·1155	·1152	·1181	·1187	·1207
22	·1138	·1145	·1156	·1156	·1131	·1136	·1139	·1151	·1147	·1177	·1183	·1203
23	·1135	·1139	·1155	·1151	·1129	·1135	·1138	·1149	·1145	·1176	·1178	·1197

1855.

Hour. Göttingen Mean Solar Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
0	0·1151	0·1149	0·1128	0·1128	0·1121	0·1154	0·1149	0·1138	0·1141	0·1139	0·1123	0·1120
1	·1153	·1150	·1133	·1133	·1125	·1159	·1149	·1144	·1145	·1141	·1124	·1120
2	·1152	·1148	·1136	·1138	·1128	·1160	·1152	·1144	·1146	·1143	·1124	·1119
3	·1156	·1150	·1136	·1141	·1129	·1163	·1155	·1148	·1149	·1145	·1124	·1120
4	·1152	·1150	·1138	·1143	·1133	·1165	·1156	·1149	·1146	·1146	·1126	·1120
5	·1152	·1148	·1139	·1144	·1137	·1160	·1156	·1148	·1146	·1146	·1127	·1118
6	·1153	·1147	·1138	·1145	·1137	·1167	·1158	·1148	·1146	·1145	·1128	·1120
7	·1152	·1149	·1139	·1145	·1140	·1169	·1159	·1151	·1146	·1147	·1129	·1121
8	·1153	·1150	·1140	·1143	·1139	·1169	·1161	·1154	·1147	·1149	·1130	·1121
9	·1153	·1147	·1139	·1142	·1136	·1169	·1159	·1155	·1148	·1150	·1130	·1120
10	·1153	·1151	·1141	·1142	·1135	·1166	·1158	·1155	·1149	·1149	·1133	·1122
11	·1156	·1151	·1140	·1145	·1136	·1167	·1159	·1156	·1150	·1150	·1130	·1122
12	·1157	·1151	·1141	·1142	·1136	·1167	·1161	·1155	·1150	·1149	·1131	·1123
13	·1156	·1153	·1142	·1146	·1137	·1166	·1163	·1154	·1151	·1150	·1132	·1123
14	·1158	·1154	·1142	·1145	·1138	·1167	·1162	·1155	·1149	·1150	·1134	·1125
15	·1159	·1155	·1141	·1144	·1138	·1168	·1161	·1157	·1147	·1150	·1132	·1127
16	·1160	·1154	·1142	·1144	·1138	·1168	·1162	·1157	·1149	·1152	·1135	·1128
17	·1161	·1156	·1144	·1146	·1136	·1169	·1162	·1157	·1148	·1154	·1135	·1130
18	·1163	·1158	·1144	·1146	·1136	·1169	·1164	·1156	·1148	·1155	·1137	·1131
19	·1163	·1158	·1144	·1147	·1135	·1166	·1162	·1154	·1147	·1156	·1138	·1133
20	·1163	·1159	·1144	·1144	·1132	·1162	·1158	·1152	·1143	·1152	·1138	·1132
21	·1161	·1157	·1140	·1140	·1131	·1158	·1157	·1150	·1139	·1150	·1134	·1130
22	·1157	·1153	·1135	·1133	·1126	·1156	·1154	·1145	·1136	·1144	·1132	·1128
23	·1155	·1151	·1131	·1130	·1122	·1155	·1152	·1142	·1136	·1141	·1127	·1125

TABLE XI.—MEAN MONTHLY DETERMINATION of the HORIZONTAL MAGNETIC FORCE, &c.—*concluded.*

1856.

Hour. Göttingen Mean Solar Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
0	0·1130	0·1147	0·1132	0·1143	0·1160	0·1161	0·1155	0·1160	0·1147	0·1211	0·1189	0·1192
1	·1130	·1148	·1134	·1146	·1164	·1164	·1157	·1161	·1154	·1211	·1188	·1192
2	·1133	·1146	·1135	·1148	·1166	·1165	·1161	·1163	·1158	·1212	·1188	·1191
3	·1133	·1146	·1137	·1152	·1166	·1168	·1163	·1163	·1156	·1213	·1189	·1191
4	·1133	·1147	·1137	·1154	·1167	·1170	·1162	·1161	·1157	·1216	·1189	·1190
5	·1131	·1147	·1136	·1156	·1171	·1172	·1164	·1162	·1157	·1216	·1188	·1191
6	·1130	·1147	·1136	·1158	·1172	·1174	·1164	·1165	·1158	·1219	·1190	·1192
7	·1130	·1149	·1139	·1157	·1175	·1175	·1167	·1168	·1160	·1218	·1191	·1192
8	·1131	·1148	·1139	·1158	·1175	·1176	·1169	·1169	·1163	·1219	·1190	·1192
9	·1132	·1150	·1141	·1159	·1173	·1175	·1169	·1171	·1165	·1219	·1190	·1192
10	·1133	·1149	·1141	·1159	·1173	·1174	·1169	·1172	·1162	·1219	·1190	·1191
11	·1134	·1151	·1143	·1160	·1172	·1173	·1170	·1173	·1166	·1220	·1192	·1193
12	·1134	·1152	·1143	·1163	·1174	·1178	·1170	·1174	·1168	·1219	·1190	·1194
13	·1134	·1153	·1143	·1163	·1175	·1176	·1170	·1180	·1167	·1219	·1192	·1194
14	·1135	·1153	·1143	·1161	·1174	·1177	·1170	·1179	·1168	·1219	·1193	·1196
15	·1137	·1154	·1144	·1162	·1173	·1177	·1170	·1180	·1168	·1221	·1194	·1196
16	·1139	·1156	·1145	·1162	·1176	·1177	·1171	·1180	·1170	·1223	·1195	·1199
17	·1141	·1157	·1146	·1162	·1176	·1178	·1171	·1180	·1173	·1223	·1197	·1200
18	·1142	·1159	·1148	·1164	·1176	·1177	·1170	·1179	·1168	·1224	·1199	·1201
19	·1144	·1160	·1149	·1163	·1175	·1176	·1170	·1178	·1169	·1224	·1199	·1202
20	·1143	·1159	·1146	·1162	·1171	·1172	·1166	·1177	·1164	·1220	·1199	·1202
21	·1140	·1158	·1143	·1156	·1167	·1166	·1162	·1172	·1154	·1217	·1199	·1199
22	·1135	1151	·1139	·1150	·1163	·1159	·1158	·1168	·1149	·1211	·1195	·1197
23	·1133	·1148	·1134	·1145	·1160	·1155	·1156	·1163	·1149	·1210	·1191	·1194

1857.

0	0·1188	0·1222	0·1224	0·1212	0·1196	0·1205	01209	0·1216	0·1218	0·1235	0·1258	0·1261
1	·1185	·1222	·1229	·1213	·1197	·1208	1212	·1219	·1218	·1234	·1257	·1263
2	·1189	·1224	·1231	·1216	·1203	·1208	1213	·1218	·1220	·1236	·1257	·1267
3	·1191	·1226	·1234	·1219	·1202	·1212	1214	·1219	·1221	·1236	·1259	·1267
4	·1193	·1230	·1236	·1221	·1207	·1212	1216	·1219	·1215	·1238	·1261	·1268
5	·1192	·1231	·1235	·1223	·1209	·1212	1217	·1219	·1218	·1239	·1263	·1268
6	·1194	·1232	·1233	·1225	·1212	·1215	1216	·1220	·1222	·1240	·1264	·1269
7	·1193	·1233	·1235	·1226	·1213	·1217	1221	·1225	·1225	·1242	·1265	·1269
8	·1193	·1231	·1235	·1226	·1211	·1218	1223	·1226	·1227	·1243	·1266	·1269
9	·1192	·1230	·1234	·1225	·1210	·1220	1224	·1228	·1227	·1243	·1270	·1270
10	·1193	·1230	·1235	·1226	·1208	·1219	1224	·1229	·1229	·1245	·1269	·1271
11	·1192	·1231	·1236	·1226	·1209	·1222	1224	·1230	·1232	·1246	·1272	·1271
12	·1193	·1231	·1236	·1226	·1210	·1223	1229	·1231	·1232	·1247	·1273	·1272
13	·1196	·1230	·1235	·1227	·1209	·1224	1227	·1232	·1231	·1248	·1272	·1274
14	·1196	·1232	·1235	·1225	·1211	·1226	1228	·1232	·1230	·1248	·1274	·1274
15	·1198	·1231	·1236	·1227	·1211	·1227	1229	·1233	·1232	·1249	·1274	·1274
16	·1198	·1232	·1236	·1227	·1212	·1228	1231	·1234	·1231	·1249	·1275	·1274
17	·1200	·1233	·1237	·1227	·1213	·1229	1232	·1233	·1233	·1251	·1274	·1276
18	·1202	·1236	·1238	·1227	·1212	·1229	1232	·1233	·1233	·1251	·1275	·1279
19	·1203	·1237	·1238	·1228	·1211	·1226	1230	·1232	·1233	·1251	·1276	·1280
20	·1203	·1237	·1237	·1227	·1209	·1219	1225	·1229	·1230	·1251	·1274	·1278
21	·1201	·1236	·1235	·1221	·1207	·1216	1220	·1226	·1226	·1249	·1272	·1275
22	·1197	·1230	·1230	·1216	·1206	·1212	1212	·1223	·1222	·1246	·1265	·1268
23	·1191	·1225	·1226	·1214	·1206	·1208	1209	·1214	·1219	·1240	·1260	·1263

TABLE X.—MEAN, through the Range of Years, of the MONTHLY MEAN DETERMINATIONS of the DIURNAL INEQUALITY of HORIZONTAL FORCE; exhibited separately for the different Months.

1848 to 1857.

Hour. Göttingen Mean Solar Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
0	−0·00074	−0·00094	−0·00124	−0·00157	−0·00142	−0·00129	−0·00140	−0·00125	−0·00118	−0·00119	−0·00081	−0·00059
1	− 71	− 91	− 90	− 119	− 110	− 93	− 94	− 86	− 69	− 97	− 72	− 43
2	− 43	− 68	− 55	− 76	− 70	− 60	− 59	− 58	− 29	− 70	− 57	− 36
3	− 21	− 46	− 20	− 31	− 31	− 20	− 17	− 20	− 8	− 40	− 43	− 29
4	− 27	− 28	− 3	− 2	− 1	+ 7	+ 8	− 9	− 13	− 25	− 34	− 41
5	− 27	− 20	+ 4	+ 28	+ 45	+ 31	+ 30	0	− 5	− 17	− 23	− 38
6	− 13	− 5	+ 9	+ 53	+ 74	+ 56	+ 47	+ 18	+ 9	− 2	− 10	− 21
7	− 18	+ 8	+ 17	+ 52	+ 90	+ 76	+ 64	+ 40	+ 22	+ 1	− 5	− 12
8	− 16	+ 11	+ 21	+ 45	+ 87	+ 76	+ 69	+ 41	+ 31	+ 13	+ 1	− 20
9	− 13	+ 2	+ 20	+ 31	+ 45	+ 61	+ 49	+ 42	+ 38	+ 17	− 1	− 17
10	− 8	− 2	+ 27	+ 30	+ 37	+ 45	+ 41	+ 43	+ 37	+ 26	+ 7	− 6
11	− 5	+ 5	+ 28	+ 34	+ 36	+ 41	+ 36	+ 42	+ 53	+ 21	+ 6	− 6
12	+ 1	+ 9	+ 29	+ 35	+ 33	+ 43	+ 39	+ 43	+ 57	+ 30	+ 13	− 4
13	+ 4	+ 6	+ 23	+ 37	+ 34	+ 36	+ 34	+ 46	+ 52	+ 23	+ 8	+ 5
14	+ 14	+ 22	+ 26	+ 34	+ 34	+ 39	+ 41	+ 42	+ 46	+ 31	+ 21	+ 9
15	+ 24	+ 20	+ 31	+ 36	+ 40	+ 41	+ 33	+ 50	+ 44	+ 34	+ 30	+ 14
16	+ 34	+ 29	+ 40	+ 42	+ 39	+ 42	+ 42	+ 56	+ 53	+ 51	+ 39	+ 31
17	+ 49	+ 44	+ 52	+ 45	+ 41	+ 47	+ 51	+ 50	+ 56	+ 57	+ 50	+ 49
18	+ 65	+ 62	+ 58	+ 58	+ 36	+ 40	+ 40	+ 39	+ 40	+ 65	+ 64	+ 67
19	+ 70	+ 73	+ 58	+ 52	+ 17	+ 24	+ 23	+ 23	+ 31	+ 62	+ 67	+ 78
20	+ 66	+ 65	+ 38	+ 17	− 24	− 26	− 34	− 19	− 5	+ 38	+ 53	+ 68
21	+ 34	+ 35	− 15	− 42	− 57	− 79	− 86	− 63	− 66	− 12	+ 24	+ 56
22	− 8	− 14	− 75	− 111	− 103	− 120	− 124	− 91	− 108	− 70	− 22	+ 2
23	− 52	− 61	− 116	− 154	− 133	− 142	− 143	− 122	− 122	− 101	− 61	− 36

TABLE XI.—MEAN, through the Range of Months, of the MONTHLY MEAN DETERMINATIONS of the DIURNAL INEQUALITY of HORIZONTAL FORCE; exhibited separately for the different Years.

January to December.

Hour. Göttingen Mean Solar Time.	1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.	Mean. 1848 to 1857.
0	−0·0017	−0·0014	−0·0013	−0·0011	−0·0014	−0·0009	−0·0008	−0·0008	−0·0007	−0·0009	−0·00110
1	− 13	− 10	− 9	− 8	− 11	− 7	− 6	− 5	− 6	− 9	− 84
2	− 8	− 4	− 4	− 5	− 9	− 5	− 5	− 4	− 4	− 6	− 54
3	− 2	0	0	− 2	− 4	− 2	− 3	− 2	− 3	− 5	− 23
4	0	+ 2	+ 2	− 1	− 3	0	− 3	− 1	− 3	− 4	− 11
5	+ 3	+ 4	+ 3	0	0	+ 1	− 2	− 2	− 2	− 3	+ 2
6	+ 6	+ 7	+ 5	+ 2	+ 2	+ 3	− 1	− 1	− 1	− 2	+ 18
7	+ 7	+ 7	+ 5	+ 3	+ 3	+ 4	+ 1	+ 1	0	0	+ 31
8	+ 7	+ 6	+ 5	+ 3	+ 3	+ 4	+ 1	+ 1	+ 1	+ 1	+ 32
9	+ 6	+ 4	+ 3	+ 3	+ 3	+ 3	0	+ 1	+ 2	+ 1	+ 26
10	+ 5	+ 4	+ 3	+ 3	+ 2	+ 4	+ 1	+ 1	+ 1	+ 2	+ 27
11	+ 4	+ 4	+ 3	+ 3	+ 3	+ 3	+ 1	+ 2	+ 3	+ 2	+ 28
12	+ 4	+ 3	+ 2	+ 4	+ 4	+ 3	+ 2	+ 2	+ 4	+ 4	+ 33
13	+ 3	+ 3	+ 2	+ 3	+ 4	+ 3	+ 2	+ 3	+ 4	+ 4	+ 31
14	+ 3	+ 3	+ 3	+ 3	+ 4	+ 3	+ 2	+ 3	+ 4	+ 4	+ 32
15	+ 3	+ 3	+ 3	+ 4	+ 3	+ 4	+ 3	+ 3	+ 5	+ 5	+ 36
16	+ 4	+ 3	+ 3	+ 5	+ 5	+ 5	+ 3	+ 4	+ 6	+ 6	+ 44
17	+ 5	+ 4	+ 4	+ 6	+ 5	+ 5	+ 5	+ 5	+ 7	+ 7	+ 53
18	+ 4	+ 4	+ 4	+ 6	+ 6	+ 6	+ 5	+ 6	+ 8	+ 7	+ 56
19	+ 2	+ 2	+ 5	+ 6	+ 5	+ 5	+ 5	+ 5	+ 8	+ 8	+ 51
20	− 1	− 2	+ 1	+ 3	+ 2	+ 4	+ 3	+ 3	+ 5	+ 5	+ 23
21	− 7	− 7	− 4	− 1	− 3	0	− 1	+ 1	+ 1	+ 2	− 19
22	− 12	− 11	− 10	− 6	− 9	− 5	− 5	− 3	− 3	− 3	− 67
23	− 15	− 13	− 14	− 10	− 13	− 8	− 8	− 6	− 6	− 7	− 100

REDUCTIONS OF MAGNETIC VERTICAL FORCE REFERRED TO THE SUN'S PLACE.

TABLE XII.—MEAN VERTICAL MAGNETIC FORCE (diminished by a Constant of ·600 nearly), on each Astronomical Day, as deduced from the Mean of Twenty-four hourly Measures of Ordinates of the Photographic Register on that Day, each corrected for Temperature.

1849.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	..	..	..	0·0342	..	..	0·0454	0·0389	..	..	0·0426	..
2	..	..	..	·0338	..	..	·0474	·0398	0·0435	0·0441	·0435	..
3	..	0·0396	..	·0337	0·0462	..	·0434	..	·0431	..	·0429	..
4	0·0363	..	..	..	·0478	0·0476	..	·0381	·0426	·0452	·0441	..
5	·0371	·0404	..	..	..	..	·0436	·0388	·0430	..	·0420	0·0399
6	..	·0400	..	·0364	..	·0464	..	·0412	·0416	·0426	·0410	..
7	..	·0394	0·0390	·0354	..	·0446	..	..	·0395	·0441	·0410	..
8	·0387	..	..	·0343	..	·0437	..	·0456	·0391	·0460	·0443	..
9	..	..	..	·0334	·0369	·0418	·0472	·0420	·0390	..	..	..
10	..	..	..	..	·0352	·0403	·0456	·0441	·0399	·0421	·0440	..
11	·0379	·0380	..	·0311	..	·0385	..	·0445	·0395	·0430	·0433	·0412
12	·0362	·0376	..	..	..	·0373	·0451	..	..	·0437	·0413	·0422
13	..	·0363	..	..	·0418	·0419	·0451	..	..	·0424	..	·0398
14	·0416	·0389	·0324	..	..	·0425	·0430	·0387	·0363	·0437	·0427	·0415
15	·0385	..	·0342	..	..	..	·0412	..	·0382	·0427	·0406	..
16	..	·0384	·0356	..	..	·0422	·0427	..	·0385	·0428	·0394	..
17	·0426	·0381	·0356	..	..	·0423	·0417	..	·0390	..	·0393	..
18	..	·0374	·0329	..	..	..	·0388	..	·0355	..	·0401	..
19	..	..	..	..	..	·0409	·0347	·0398	·0389	..	·0423	·0365
20	..	..	·0335	..	·0428	·0432	·0346	·0415	·0390	..	..	·0345
21	..	·0379	·0332	..	·0431	·0447	·0377	·0423	·0381	..	·0428	·0327
22	..	..	·0322	..	..	·0442	·0397	·0436	·0395	..	..	·0306
23	..	·0397	·0312	..	..	·0491	·0395	·0418	·0399	·0465	·0403	..
24	..	·0384	..	..	·0470	·0460	·0357	·0416	·0390	·0475	·0415	..
25	..	·0375	·0276	..	·0476	·0437	·0377	·0433	·0388	·0466	..	·0340
26	..	..	..	..	·0474	..	..	·0437	·0385	·0479	..	..
27	..	·0372	..	..	..	·0470	..	·0425	·0404	..	·0381	..
28	..	..	·0312	..	·0446	·0450	·0418	·0409	..	..	·0371	..
29	·0368		..	..	..	·0409	..	·0423	·0420	·0457	·0390	..
30	..		·0328	..	·0469	·0407	..	·0438	..	·0440	..	·0346
31	..		·0351		·0479		·0388	·0434		·0442		·0377

1850.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	·0385	·0389	·0398	·0397	·0403	..	..	·0466	·0409	·0386	·0401	·0353
2	·0414	·0414	·0425	·0417	·0384	·0422	·0431	·0430	·0421	·0370	·0416	·0351
3	..	..	·0378	·0411	·0383	·0438	·0420	·0456	·0442	·0388	·0412	..
4	..	·0369	·0366	..	·0400	·0433	·0436	·0483	·0425	·0386	·0407	·0356
5	·0390	·0384	·0361	·0412	·0394	·0432	·0421	·0481	..	0406	·0379	·0358
6	·0371	·0395	·0400	·0400	·0404	·0444	·0426	·0478	·0405	·0374	·0410	·0373
7	·0329	·0389	·0379	·0425	·0379	·0399	·0432	·0454	·0407	·0401	..	·0378
8	·0310	·0379	·0371	·0439	·0395	·0400	·0422	·0450	·0398	·0402	·0401	·0383
9	·0317	·0392	·0387	·0405	·0389	·0425	·0416	·0433	·0413	·0382	·0365	·0354
10	·0343	·0354	..	..	·0395	·0431	·0414	·0439	·0407	·0381	·0372	·0352
11	·0372	·0345	·0391	..	·0408	·0451	·0432	·0466	·0402	·0369	·0411	·0338
12	·0361	·0349	·0393	..	·0409	·0425	·0457	·0474	·0410	·0375	·0408	..
13	·0379	..	·0395	·0402	·0391	·0397	·0472	·0439	·0406	·0374	·0370	·0372
14	·0347	·0349	·0388	·0395	·0378	·0378	·0472	·0452	·0406	·0358	·0368	·0377
15	·0356	·0398	·0379	·0393	·0380	·0363	..	..	·0397	·0381	..	·0378
16	·0325	·0419	·0357	·0393	·0373	·0394	·0515	·0459	·0395	·0380	·0371	·0378
17	..	·0368	·0340	·0395	·0390	..	..	·0470	·0405	·0397	·0401	·0373
18	·0383	·0395	·0365	·0416	·0402	·0410	..	·0467	·0410	·0406	·0361	·0336
19	·0381	·0405	·0377	·0408	·0394	·0415	..	·0457	·0398	·0412	·0349	·0352
20	·0385	..	·0389	·0402	·0400	·0433	..	·0423	·0409	·0416	·0375	·0340
21	·0331	·0378	·0394	·0392	·0439	·0442	·0449	·0440	·0428	·0376	·0384	·0327
22	·0339	·0419	·0369	·0396	·0423	·0444	·0488	..	·0414	·0364	·0373	·0333
23	·0367	·0399	·0384	·0381	..	·0454	·0483	..	·0421	·0345	·0408	·0347
24	·0388	·0407	·0360	·0390	·0401	·0444	·0445	·0439	·0413	·0361	·0392	..
25	·0365	..	·0347	·0388	·0401	·0433	..	·0405	·0422	·0366	·0381	..
26	·0386	·0405	·0339	·0396	·0391	·0416	·0414	·0423	·0432	·0369	·0359	..
27	·0373	·0394	·0370	·0396	·0400	·0397	·0411	·0405	..	·0350	·0362	..
28	·0348	·0392	·0359	·0372	·0406	..	·0419	·0443	·0415	·0365	·0358	·0389
29	·0399		·0344	·0382	..	·0402	·0447	·0404	·0409	·0367	·0356	·0373
30	·0395		·0367	·0395	·0424	·0352	·0442	·0398	·0401	·0349	·0357	·0384
31	..		·0391		·0437		·0440	·0386		·0378		·0414

TABLE XII.—MEAN VERTICAL MAGNETIC FORCE, &c.—*continued.*

1851.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	0·0427	0·0386	0·0375	0·0417	0·0416	0·0455	0·0447	0·0450	0·0454	..	0·0340	0·0316
2	..	·0423	·0357	·0409	..	·0459	·0458	·0447	..	..	·0332	·0346
3	..	..	..	·0408	·0412	·0461	·0406	·0463	·0429	0·0382	·0318	·0343
4	..	·0409	..	·0413	·0381	·0418	·0397	·0463	·0422	·0393	·0315	·0331
5	·0398	·0386	·0389	·0399	·0396	·0392	·0401	·0439	·0405	·0375	·0298	·0348
6	..	·0413	·0377	·0380	·0412	·0432	·0413	·0414	·0390	·0380	·0332	·0369
7	·0367	·0381	..	·0366	·0439	..	·0430	·0437	..	·0374	·0351	·0394
8	..	..	..	·0400	·0457	..	·0418	·0471	·0403	·0379	·0352	·0377
9	..	·0409	·0369	·0394	..	·0448	·0390	·0430	·0383	·0353	·0363	..
10	·0364	·0408	·0373	·0396	·0468	..	·0381	·0417	·0383	·0400	·0354	·0381
11	·0384	..	·0383	·0404	·0450	·0429	·0372	·0434	·0384	·0403	·0357	·0382
12	·0400	·0390	·0372	..	·0458	·0429	·0434	·0461	·0390	·0419	·0362	·0349
13	·0380	·0401	·0404	..	·0438	·0448	·0428	·0467	·0400	·0397	·0338	·0355
14	..	..	·0384	·0385	·0412	·0448	·0430	·0437	·0417	·0407	·0354	·0374
15	..	·0403	·0417	·0408	·0420	·0436	·0422	·0439	·0398	..	·0325	·0343
16	..	·0378	..	..	·0422	·0452	·0400	·0431	·0404	..	·0293	·0342
17	·0395	·0375	·0366	·0412	..	·0441	·0393	·0439	·0405	·0338	·0300	·0370
18	·0379	..	·0391	·0451	·0405	·0433	·0394	·0429	·0402	·0344	·0309	·0357
19	·0380	..	·0390	·0453	·0402	·0492	·0401	·0409	·0394	·0370	·0296	·0355
20	·0369	..	·0422	·0437	·0405	·0495	·0418	·0444	·0401	·0376	..	·0377
21	..	·0414	·0422	·0464	·0413	·0503	·0427	·0458	·0390	·0387	·0342	·0406
22	·0403	..	·0416	·0447	·0442	·0452	·0425	·0470	·0402	·0402	·0362	·0363
23	·0387	·0355	·0398	·0442	..	..	·0422	·0441	·0396	·0372	..	·0369
24	·0364	·0393	·0398	·0434	·0434	·0428	·0405	..	·0410	·0380	·0347	·0364
25	·0356	·0394	·0396	·0425	·0451	·0458	·0399	·0406	·0409	·0362	·0342	·0370
26	·0367	..	·0403	·0418	·0441	·0487	·0393	..	·0359	·0366	·0334	·0344
27	·0418	..	·0387	·0394	·0403	·0486	·0412	·0410	·0361	·0371	·0339	·0318
28	..	·0393	·0434	·0403	·0434	·0454	·0409	·0408	·0373	·0356	..	·0326
29	·0417		·0425	·0405	·0452	·0431	·0442	·0393	..	·0367	·0334	..
30	..		·0402	·0415	·0450	·0433	·0433	·0390	·0386	·0344	·0338	·0347
31	·0396		·0391		·0442		·0410	·0404		·0339		·0328

1852.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	0·0334	..	0·0342	0·0372	0·0423	0·0392	0·0436	0·0497	..	..	..	0·0348
2	·0302	0·0411	·0367	·0372	·0406	..	·0441	·0492	0·0471	..	..	·0388
3	·0327	..	..	·0367	·0393	·0393	·0451	·0471	·0488	..	..	·0383
4	·0337	·0365	·0350	·0356	·0391	·0400	·0471	·0459	·0484	..	..	·0384
5	·0320	..	·0343	·0388	·0403	..	·0479	·0458	·0478	..	..	·0377
6	·0336	·0405	·0353	·0387	..	·0431	·0453	·0445	·0494	0·0420	..	..
7	·0368	·0370	·0357	..	·0420	·0445	..	·0465	·0491	·0401	0·0423	·0382
8	·0337	·0382	·0371	·0384	·0436	..	·0427	·0454	·0463	·0401	·0437	·0392
9	·0342	·0381	·0384	·0354	·0438	·0438	·0424	..	·0458	·0403	..	·0361
10	..	·0357	·0373	·0381	·0441	..	·0408	..	..	·0393	..	..
11	..	·0365	·0360	·0376	..	..	·0391	·0450	..	..	..	·0401
12	..	·0358	·0369	·0379	..	..	..	·0413	·0440	..	..	·0385
13	..	·0350	·0365	·0393	·0405	·0409	·0406	·0435	·0438	..	..	·0373
14	..	..	·0339	..	..	..	..	·0454	·0434	·0436	·0380	..
15	..	·0353	·0350	·0397	..	..	·0422	·0457	..	·0436	·0395	..
16	·0377	·0369	·0372	·0376	·0444	..	..	·0438	·0420	·0429	·0405	·0358
17	·0377	..	·0378	..	..	..	·0409	·0459	·0434	·0417	..	..
18	·0352	..	·0366	·0394	..	..	·0362	·0480	·0422	..	·0384	·0401
19	·0327	..	·0363	·0360	..	..	·0387	·0484	·0440	..	..	..
20	·0346	..	·0381	..	..	..	·0377	·0497	·0443	·0434	·0385	..
21	·0346	·0343	·0388	·0392	..	..	·0379	·0468	·0415	·0423	..	..
22	·0359	·0370	..	·0402	..	..	·0373	·0486	..	·0448	·0401	·0370
23	·0354	..	·0411	·0423	·0383	..	·0385	·0468	·0442	..	·0366	·0389
24	·0326	·0355	·0385	..	·0396	..	·0401	·0484	·0456	·0448	..	·0363
25	·0333	..	·0374	..	·0399	..	·0396	·0458	·0464	·0435	·0371	..
26	·0349	·0364	·0364	·0396	·0392	..	·0389	·0489	..	·0402	·0384	·0400
27	·0349	·0365	·0346	·0385	·0376	·0442	·0393	..	..	..	..	·0385
28	·0354	·0359	·0345	·0401	·0387	·0443	·0393	·0497	·0454	·0421	..	..
29	..	..	·0385	..	·0394	·0437	..	·0481	..	·0398	·0344	..
30	·0368		·0422	·0426	·0362	..	..	·0473	·0430	·0423	·0346	..
31	·0333			..	..		·0389	·0453		..		..

TABLE XII.—MEAN VERTICAL MAGNETIC FORCE, &c.—*continued.*

1853.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	..	0·0362	0·0298	..	0·0428	0·0332	0·0419	0·0474	..	..	..	..
2	..	..	·0267	0·0347	..	·0346	·0406	·0471	0·0423	..	..	0·0346
3	..	..	..	·0312	·0406	..	·0425	·0472	·0372	0·0339	0·0368	·0325
4	..	·0328	..	·0321	·0395	..	·0456	·0472	·0392	·0333	·0382	·0313
5	..	·0330	·0296	·0354	·0414	·0391	·0454	·0443	..	·0367	·0373	..
6	..	·0358	·0328	·0364	·0388	·0382	·0467	·0433	..	·0374	..	..
7	..	·0361	·0324	·0371	·0382	·0407	·0482	·0465	·0387	·0354	..	..
8	..	·0383	·0363	..	·0353	·0448	·0492	·0460	·0386	·0385	..	·0380
9	..	..	·0324	..	·0336	·0417	..	·0452	·0396	·0397	·0343	·0363
10	..	·0343	·0334	·0316	·0369	·0420	·0442	·0440	..	..	·0334	..
11	..	..	..	·0341	·0394	·0445	·0420	·0444	·0415	..	·0346	·0366
12	..	·0346	·0360	·0386	·0407	·0429	..	..	·0417	·0388	·0333	·0314
13	..	·0351	·0339	..	·0396	·0392	·0439	..	·0430	·0384	·0348	·0315
14	..	·0311	·0374	·0309	·0421	·0370	·0455	·0425	·0388	..	·0367	·0368
15	..	·0323	·0317	·0307	·0407	·0391	·0405	..	·0402	·0400	·0333	..
16	..	..	..	..	·0437	·0410	·0387	·0385	·0400	·0399	·0325	·0338
17	..	·0337	..	..	..	·0404	·0406	·0413	..	·0334	·0342	·0288
18	..	..	..	·0365	..	..	·0406	..	·0418	·0352	·0324	·0319
19	..	..	·0264	·0370	..	·0374	·0417	·0427	·0410	..	..	·0327
20	..	..	·0305	..	·0401	..	·0434	·0451	·0409	..	·0354	..
21	..	..	·0292	..	·0379	·0391	·0430	·0423	·0397	·0344	..	·0325
22	..	..	..	..	·0405	·0385	·0432	·0428	·0382	·0398	..	·0336
23	..	..	·0313	..	·0411	·0434	·0446	·0445	·0381	·0400	..	·0325
24	..	·0314	..	..	..	·0472	·0436	·0399	·0352	·0393	·0304	·0330
25	..	·0299	..	..	·0417	·0444	·0440	..	·0354	..	·0303	·0358
26	..	·0300	·0294	..	..	..	·0417	·0391	..	·0392	·0324	·0294
27	..	·0340	..	..	·0426	·0432	·0429	..	..	·0383	..	..
28	..	..	·0307	·0416	·0414	·0454	·0445	·0383	..	..	·0331	..
29	..		·0312	·0415	·0366	·0443	..	·0400	..	..	·0329	..
30	..		·0333	·0411	..	·0438	..	·0410	·0399	..	·0332	..
31	..		·0343		·0390		·0443	·0411		..		..

1854.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	0·0374	0·0422	0·0403	..	0·0384	0·0453	0·0407	0·0443	0·0408	..	..	0·0349
2	..	..	·0389	..	·0399	·0467	·0385	·0407	·0408	0·0387	0·0381	·0338
3	..	..	·0394	..	..	..	·0406	·0439	·0412	·0389	·0399	·0323
4	..	·0346	·0380	..	·0427	·0433	·0398	·0401	·0415	..	·0325	·0358
5	·0348	·0360	·0380	..	·0436	·0430	·0383	·0348	·0408	..	·0349	..
6	·0378	..	·0382	..	·0427	·0432	·0384	..	·0407	..	·0355	..
7	·0340	..	·0363	·0436	·0417	..	·0373	·0386	·0409	·0381	·0324	·0351
8	·0360	..	·0393	..	·0434	·0420	·0391	·0409	·0420	·0371	·0337	..
9	·0365	..	..	..	·0405	·0415	·0399	·0424	·0402	·0381	..	·0347
10	..	·0374	..	..	·0419	·0430	..	·0425	·0383	·0396	·0320	..
11	..	·0391	..	..	..	·0421	·0381	·0429	·0395	·0400	·0358	..
12	·0398	·0396	..	..	·0442	·0435	·0400	·0433	·0418	..	·0389	..
13	·0373	·0383	..	..	·0442	·0424	·0387	·0448	·0448	..	·0328	..
14	..	·0349	..	..	·0456	·0440	·0397	·0446	·0446	..	..	..
15	·0409	·0388	·0396	..	·0460	·0442	..	·0413	·0391	..	·0325	·0411
16	·0360	·0375	·0411	..	..	·0437	·0406	·0395	·0410	·0370	·0366	·0407
17	·0365	·0384	·0410	..	·0437	·0443	·0412	·0382	·0423	·0360	·0373	..
18	·0391	·0392	·0378	..	..	·0449	·0427	·0375	·0392	·0369	·0382	..
19	·0421	·0376	·0389	..	..	·0439	·0410	..	·0395	·0334	..	·0322
20	..	·0373	·0358	..	..	·0418	·0418	·0443	·0409	·0360	..	·0338
21	·0388	..	..	..	·0447	·0413	·0438	·0435	·0382	·0362	·0316	·0333
22	·0398	·0394	·0374	·0462	·0449	·0454	..	·0417	·0357	·0375	·0331	·0349
23	·0393	·0391	·0403	·0427	·0438	·0458	·0477	·0395	..	·0373	·0329	..
24	·0388	..	·0390	·0409	·0424	·0449	·0479	·0425	·0385	·0345	·0327	..
25	..	·0402	·0371	·0381	..	·0465	·0483	..	·0384	·0363	·0321	..
26	·0395	·0406	·0375	·0385	..	·0464	·0449	..	..	·0348	·0342	·0351
27	·0380	·0383	·0401	..	..	..	..	·0438	·0392	·0351	[illegible]	·0360
28	·0388	·0408	..	·0376	..	..	·0410	·0461	·0394	..	·0327	..
29	·0367		..	·0390	·0441	·0377	·0405	..	..	..	·0350	·0313
30	·0398		..	·0389	..	..	·0440	·0455	..	..	·0331	·0348
31	·0412		..		·0451		·0435	·0436		..		·0366

TABLE XII.—MEAN VERTICAL MAGNETIC FORCE, &c.—*continued.*

1855.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	..	0·0336	0·0376	0·0353	0·0367	0·0342	0·0438	0·0420	0·0406	..	..	0·0318
2	0·0350	·0326	·0370	·0361	·0388	..	..	·0435	·0382	..	0·0294	·0322
3	·0382	·0301	..	·0355	·0389	·0394	·0458	·0431	·0384	0·0354	·0303	·0308
4	·0399	..	..	·0345	·0381	·0404	·0460	·0429	·0404	..	·0308	·0309
5	·0403	..	·0360	·0396	·0374	·0402	..	·0435	..	·0371	·0299	..
6	·0382	·0365	·0380	·0415	·0369	·0459	..	..	..	·0390	·0327	..
7	..	·0361	·0362	·0434	·0382	..	..	·0433	·0393	·0389	·0353	..
8	..	·0349	·0363	·0406	·0400	..	·0417	·0420	·0407	·0383	·0366	·0303
9	·0406	·0361	·0343	·0363	·0368	·0405	·0430	·0419	·0391	·0358	·0340	·0328
10	·0394	·0321	..	·0406	·0389	·0421	·0442	·0390	..	·0362	·0350	·0388
11	..	·0285	·0347	..	..	·0421	·0449	·0406	·0403	..	·0364	·0298
12	·0312	·0330	..	·0403	..	·0419	·0435	·0424	·0416	·0352	·0378	·0305
13	·0327	·0352	·0358	·0412	·0376	·0419	..	·0408	·0403	·0350	·0382	·0298
14	·0374	·0302	·0380	·0412	·0349	·0419	·0453	·0380	..	..	·0352	·0290
15	·0317	..	·0373	·0402	·0368	·0386	·0388	·0405	..	..	·0324	..
16	·0320	·0341	·0404	·0451	·0364	·0376	·0423	·0433	·0385	·0315	..	·0378
17	·0340	·0312	·0370	·0408	..	·0413	·0392	·0438	·0426	·0350	·0310	·0361
18	·0310	·0291	·0324	·0384	·0406	..	·0421	·0446	·0409	·0373	·0313	·0343
19	..	·0297	·0355	·0407	·0399	·0383	·0431	·0447	..	·0358	·0319	·0307
20	·0300	·0344	..	·0403	..	·0376	..	..	..	·0353	·0317	·0295
21	·0334	·0333	·0391	·0385	·0395	·0393	·0424	·0425	·0434	·0348	·0334	·0294
22	·0294	·0354	·0368	·0358	·0390	·0413	·0450	..	·0429	·0361	·0346	·0292
23	·0314	·0328	..	·0378	..	·0447	·0445	·0449	..	·0371	·0323	·0296
24	·0314	..	..	·0394	·0399	·0403	·0439	..	·0433	·0361	·0315	..
25	·0327	·0326	·0335	..	·0425	·0401	·0405	..	·0389	·0313	·0347	·0347
26	·0344	·0349	·0338	·0378	·0446	..	·0380	·0410	·0373	..	·0303	·0326
27	·0354	·0364	·0353	·0390	..	·0451	·0398	·0404	·0366	·0327	..	·0345
28	..	·0359	·0365	·0385	..	·0450	·0412	·0443	·0400	·0316	·0350	·0344
29	..		..	·0374	·0369	·0454	·0433	..	·0412	·0303	·0334	..
30	·0335		·0370	·0357	..	·0459	·0441	·0416	·0419	·0310	·0338	·0373
31	·0343		..		·0336		·0433	·0427		..		..

1856.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	0·0322	0·0319	0·0390	..	0·0357	0·0360	..	..	0·0300	0·0272	0·0291	..
2	..	..	·0410	0·0385	·0352	·0411	0·0336	0·0406	·0287	·0272	·0298	0·0236
3	·0362	·0334	..	·0348	·0358	..	·0329	·0377	·0278	..	..	·0201
4	·0386	..	·0382	·0386	·0369	..	·0331	·0352	·0291	·0267	·0230	..
5	·0376	·0361	·0364	·0375	·0354	·0411	·0355	·0348	·0282	·0275	·0250	·0231
6	·0385	·0360	·0368	·0386	..	·0391	·0347	·0334	·0289	..	·0236	·0258
7	..	·0354	·0380	..	..	..	·0365	·0346	·0310	..	·0235	·0271
8	·0378	..	·0318	·0396	·0354	·0420	·0328	·0319	·0287	·0286	..	..
9	·0379	·0367	·0328	·0365	·0353	·0430	..	·0341	·0291	..	..	·0337
10	·0349	·0366	·0328	·0380	·0397	·0426	·0319	·0372	..	·0265	..	·0338
11	·0316	·0366	·0380	·0390	·0421	·0421	·0349	·0381	·0287	·0257	·0255	·0323
12	·0321	..	·0339	·0402	·0408	..	·0356	·0362	..	·0272	·0227	·0281
13	·0322	·0376	·0369	·0414	·0409	·0419	·0329	·0365	..	..	·0211	·0292
14	·0319	·0378	·0354	..	·0384	·0427	..	·0352	·0253	..	·0231	..
15	·0303	·0399	·0349	·0388	·0379	·0391	·0343	·0336	·0263	·0306	·0207	·0283
16	·0326	..	..	·0383	·0379	..	·0369	·0330	·0283	·0264	..	·0265
17	·0332	..	·0322	..	..	..	·0327	·0353	·0254	..	·0215	..
18	·0349	..	·0337	..	·0363	..	·0324	·0352	·0282	..	·0248	·0230
19	·0361	·0323	·0362	·0410	·0384	..	..	·0322	·0236	..	·0263	·0272
20	·0363	·0325	·0408	..	·0400	·0394	..	..	..	..	·0249	·0238
21	·0355	·0344	·0388	..	..	·0376	·0327	·0254	..	..	·0253	·0245
22	·0393	·0336	·0356	·0385	·0419	·0388	·0364	·0259	..	·0322	..	·0256
23	·0354	·0344	·0373	·0394	..	..	·0377	·0256	·0262	·0335	..	..
24	·0381	·0383	..	·0410	·0376	·0393	·0397	..	·0255	·0331	·0311	·0241
25	·0390	·0367	·0352	·0413	..	·0430	·0337	..	·0253	·0295	·0288	·0257
26	·0364	·0358	·0353	·0403	..	..	·0340	·0308	·0298	·0267	·0225	·0198
27	·0393	·0398	·0372	·0407	·0406	..	·0328	·0318	·0238	..	·0225	·0204
28	·0333	·0440	·0343	·0363	·0409	..	·0345	·0296	·0291	..	·0260	..
29	·0341	..	·0360	..	·0393	·0356	·0369	·0312	·0259	·0228	·0232	·0199
30	..		·0343	·0356	..	..	·0385	·0304	·0270	·0218	·0224	·0224
31	·0317		·0375		·0351		·0397	·0322		·0255		..

TABLE XII.—MEAN VERTICAL MAGNETIC FORCE, &c.—*concluded.*

1857.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	..	..	0·0285	..	0·0298	..	0·0272	..	..	0·0269	..	..
2	..	..	·0284	0·0299	·0309	..	·0247	0·0312	0·0278	..	..	..
3	0·0291	..	·0336	·0317	·0314	0·0317	·0245	·0324	·0213	·0301	..	..
4	·0289	..	·0294	·0317	·0305	·0349	·0242	·0337	·0208	·0305	..	..
5	..	..	·0287	..	·0307	·0362	·0249	·0325	·0232	·0256	..	..
6	·0267	0·0258	·0294	·0309	·0311	..	..	·0277	·0254	..	..	0·0272
7	·0250	·0292	·0293	·0302	·0285	·0358	·0244	·0248	..	·0255	..	..
8	·0224	·0311	·0310	..	..	·0317	·0246	·0251	·0264	·0237	..	·0266
9	·0211	·0285	·0268	·0304	·0333	..	·0265	..	·0229	·0218	..	..
10	·0258	·0300	..	·0297	·0333	·0298	·0297	·0263	..	·0239	..	·0254
11	..	·0295	·0290	·0319	..	·0299	..	..	..	·0261	..	·0263
12	·0279	·0316	·0266	·0301	·0343	·0294	·0335	·0314	..	·0269	..	·0224
13	·0275	·0268	·0278	·0250	·0344	·0295	..	·0324	..	·0282	..	·0232
14	·0245	·0280	·0255	·0255	·0352	..	..	..	·0267	·0253	..	·0249
15	·0222	·0308	·0324	·0281	·0373	·0295	·0336	·0256	..	·0247	..	..
16	·0242	·0323	·0313	·0271	..	·0301	·0307	·0315	·0299	..	..	·0226
17	·0240	·0306	·0294	·0285	·0374	·0323	·0287	..	..	·0249	..	·0260
18	·0247	·0306	·0322	·0350	·0361	·0324	..	·0283	..	·0292	..	..
19	·0308	·0331	·0356	..	·0328	·0344	·0316	·0302	·0239	·0248	..	·0264
20	·0287	·0297	·0344	·0343	..	·0356	·0323	·0323	·0258	·0237	..	..
21	·0368	·0269	·0291	·0343	..	..	·0289	·0309	·0239	·0256	..	..
22	·0234	·0269	·0268	·0328	·0263	..	·0293	·0339	·0264	·0263	..	·0252
23	·0235	·0308	·0260	·0306	·0280	·0337	·0314	..	·0296	·0213	..	..
24	·0238	·0301	·0273	·0277	·0339	·0337	·0325	·0368	·0277	·0219	..	..
25	·0269	·0282	·0302	·0291	·0337	..	·0307	·0332	·0292	·0235	..	·0275
26	·0233	·0276	·0277	..	..	·0354	0·280	·0302	·0293	..	..	..
27	·0243	·0266	·0278	·0271	·0306	..	..	·0304	·0279	·0245	..	·0233
28	·0222	·0293	·0287	..	..	·0342	·0287	·0276	..	·0252	..	·0209
29	·0224		·0305	·0278	·0331	..	..	·0274	·0265	·0237	..	·0223
30	·0187		·0320	·0291	·0318	·0305	·0295	·0307	..	·0224	..	·0236
31	·0222		·0306		..		·0321	..		·0205		·0228

TABLE XIII.—MEAN VERTICAL MAGNETIC FORCE (diminished by a Constant 0·9600 nearly) in each Month, as deduced from the Mean of the Mean Daily Determinations in each Month, corrected for Temperature; showing the apparent Monthly Change of Vertical Force.

Month.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.	Mean for Years 1850, 1851, 1855, 1856, 1857.	Mean in Terms of Horizontal Force.
January	0·0385	0·0368	0·0397	0·0345	..	0·0378	0·0346	0·0351	0·0252	0·0343	0·0885
February	·0386	·0388	·0399	·0371	0·0332	·0392	·0333	·0362	·0287	·0354	·0911
March	·0329	·0375	·0393	·0371	·0318	·0397	·0363	·0362	·0295	·0358	·0922
April	·0344	·0399	·0415	·0390	·0349	·0428	·0391	0·389	·0302	·0379	·0977
May	·0436	0401	·0430	·0406	·0401	·0431	·0386	0·383	·0324	·0385	[illegible]
June	·0439	·0417	·0445	·0415	·0408	·0433	·0413	·0406	·0323	·0401	[illegible]
July	·0417	·0442	·0412	·0407	·0436	·0413	·0429	·0347	·0292	·0384	[illegible]
August	·0415	·0440	·0432	·0466	·0430	·0418	·0424	·0330	·0306	·0386	[illegible]
September	·0396	·0411	·0400	·0451	·0399	·0402	·0402	·0276	·0265	·0351	·0903
October	·0448	·0378	·0374	·0423	·0377	·0372	·0352	·0283	·0253	·0328	·0843
November	·0416	·0382	·0335	·0396	·0348	·0346	·0333	·0249	..	·0310	·0798
December	·0380	·0369	·0356	·0383	·0337	·0350	·0320	·0254	·0253	·0310	·0798

TABLE XIV.—MEAN MONTHLY DETERMINATION of the VERTICAL MAGNETIC FORCE (diminished by a Constant 0·9600 nearly), corrected for Temperature, at every Hour of the Day; obtained by taking the Mean of all the Determinations at the same Hour of the Day through each Month.

1849.

Hour, Göttingen Mean Solar Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
0	0·0383	0·038[illegible]	0·0327	0·0348	0·0426	0·0436	0·0411	0·0422	0·0405	0·0454	0·0423	0·0386
1	·0382	·0392	·0331	·0350	·0426	·0437	·0412	·0424	·0405	·0455	·0426	·0387
2	·0382	[illegible]	·0342	·0350	·0427	·0438	·0416	·0425	·0408	·0456	·0428	·0383
3	·0384	·03[illegible]7	·03[illegible]	·0352	·0432	·0439	·0420	·0421	·0406	·0457	·0428	·0388
4	·0383	·03[illegible]5	·0341	·0350	·0434	·0439	·0422	·0417	·0401	·0455	·0425	·0386
5	·0384	·03[illegible]3	·0338	·0349	·0438	·0438	·0424	·0414	·0396	·0452	·0419	·0392
6	·0384	·03[illegible]0	·0338	·0348	·0440	·0439	·0424	·0412	·0392	·0450	·0416	·0387
7	·0380	·0387	·0334	·0344	·0439	·0438	·0424	·0411	·0389	·0447	·0412	·0381
8	·0379	·0386	·0331	·0339	·0437	·0436	·0421	·0408	·0388	·0443	·0408	·0378
9	·0379	·0383	·0328	·0335	·0434	·0437	·0416	·0408	·0383	·0442	·0405	·0375
10	·0388	·0382	·0324	·0333	·0434	·0436	·0416	·0406	·0383	·0438	·0405	·0373
11	·0390	·0380	·0323	·0334	·0434	·0437	·0415	·0405	·0384	·0438	·0405	·0372
12	·0391	·0378	·0322	·0337	·0435	·0439	·0416	·0406	·0386	·0443	·0406	·0372
13	·0391	·0381	·0322	·0338	·0438	·0439	·0417	·0406	·0389	·0439	·0408	·0375
14	·0390	·0381	·0322	·0341	·0438	·0440	·0417	·0408	·0392	·0443	·0409	·0376
15	·0389	·0383	·0324	·0345	·0441	·0443	·0418	·0411	·0394	·0444	·0412	·0377
16	·0387	·0385	·0320	·0349	·0444	·0445	·0418	·0414	·0394	·0446	·0415	·0379
17	·0386	·0385	·0326	·0352	·0444	·0445	·0419	·0418	·0397	·0446	·0417	·0380
18	·0385	·0385	·0327	·0351	·0443	·0443	·0417	·0420	·0398	·0445	·0419	·0380
19	·0384	·0384	·0329	·0343	·0441	·0442	·0416	·0420	·0399	·0448	·0417	·0382
20	·0384	·0384	·0330	·0341	·0440	·0439	·0414	·0420	·0399	·0449	·0419	·0379
21	·0384	·0384	·0331	·0339	·0438	·0439	·0413	·0419	·0400	·0448	·0422	·0382
22	·0383	·0385	·0329	·0346	·0432	·0438	·0412	·0421	·0402	·0449	·0420	·0382
23	·0384	·0386	·0330	·0343	·0430	·0436	·0412	·0422	·0405	·0450	·0419	·0383

1850.

Hour, Göttingen Mean Solar Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
0	0·0380	0·0393	0·0381	0·0410	0·0411	0·0422	0·0450	0·0455	0·0434	0·0399	0·0394	0·0374
1	·0379	·03[illegible]5	·0384	·0409	·0407	·0421	·0448	·0454	·0432	·0397	·0396	·0377
2	·0380	·0396	·0390	·0407	·0406	·0417	·0444	·0452	·0433	·0391	·0394	·0379
3	·0379	·0398	·0391	·0405	·0405	·0414	·0443	·0448	·0426	·0385	·0388	·0379
4	·0374	·0394	·0385	·0405	·0401	·0416	·0442	·0439	·0417	·0378	·0382	·0375
5	·0368	·0388	·0379	·0401	·0398	·0417	·0442	·0434	·0407	·0373	·0377	·0370
6	·0363	·0387	·0375	·0398	·0[illegible]7	·0416	·0442	·0432	·0400	·0371	·0375	·0365
7	·0358	·0385	·0372	[illegible]	·0394	·0413	·0438	·0429	·0395	·0368	·0371	·0361
8	·0357	·0380	·0367	[illegible]	·0394	·0414	·0437	·0430	·0391	·0363	·0368	·0360
9	·0355	·0378	·0363	·0385	·0390	·0411	·0435	·0428	·0388	·0359	·0367	·0359
10	·0355	·0379	·0362	·0380	·0384	·0408	·0428	·0423	·0385	·0357	·0368	·0359
11	·0355	·0378	·0362	·0380	·0382	·0406	·0424	·0422	·0386	·0357	·0369	·0359
12	·0356	·0380	[illegible]	·0382	·0385	·0410	·0425	·0425	·0389	·0360	·0372	·0359
13	·0359	·0382	·0365	·0384	·0388	·0415	·0429	·0429	·0396	·0364	·0376	·0362
14	·0363	·0385	·0369	·0387	·0392	·0416	·0434	·0435	·0398	·0370	·0380	·0365
15	·0365	·0386	·0372	·0393	·0[illegible]8	·0423	·0441	·0439	·0405	·0377	·0383	·0367
16	·0367	·0388	·0375	·0399	·0404	·0425	·0445	·0443	·0410	·0381	·0387	·0369
17	·0369	·0390	·0377	·0404	·0411	·0422	·0450	·0448	·0416	·0385	·0388	·0372
18	·0371	·0390	·0377	·0407	·0413	·0422	·0451	·0450	·0420	·0388	·0388	·0372
19	·0370	·0391	·0378	·0408	·0414	·0418	·0450	·0450	·0423	·0389	·0389	·0373
20	·0372	·0392	·0380	·0408	·0413	·0417	·0449	·0448	·0425	·0390	·0389	·0374
21	·0376	·0394	·0377	·0407	·0412	·0419	·0449	·0448	·0428	·0390	·0390	·0374
22	·0378	·0393	·0380	·0406	·0411	·0421	·0452	·0451	·0430	·0392	·0391	·0374
23	·0378	·0394	·0376	·0410	·0411	·0423	·0454	·0452	·0434	·0397	·0393	·0375

TABLE XIV.—MEAN MONTHLY DETERMINATION of the VERTICAL MAGNETIC FORCE, &c.—*continued*.

1851.

Hour. Göttingen Mean Solar Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
0	0·0406	0·0410	0·0401	0·0422	0·0425	0·0441	0·0420	0·0438	0·0409	0·0390	0·0348	0·0370
1	·0406	·0409	·0400	·0420	·0423	·0437	·0417	·0436	·0406	·0387	·0348	·0368
2	·0408	·0408	·0401	·0417	·0421	·0439	·0414	·0433	·0402	·0384	·0346	·0367
3	·0408	·0406	·0400	·0416	·0419	·0440	·0410	·0431	·0397	·0378	·0344	·0361
4	·0402	·0400	·0396	·0413	·0420	·0441	·0411	·0430	·0395	·0373	·0336	·0357
5	·0394	·0393	·0391	.0413	·0423	·0442	·0409	·0429	·0393	·0367	·0331	·0355
6	·0394	·0393	·0388	.0412	·0426	·0441	·0409	·0426	·0391	·0369	·0329	·0350
7	·0390	·0392	·0387	.0409	·0425	·0439	·0408	·0423	·0391	·0367	·0326	·0348
8	·0389	·0386	·0382	.0406	·0430	·0440	·0404	·0421	·0391	·0364	·0321	·0346
9	·0389	·0384	·0379	.0401	·0429	·0442	·0401	·0419	·0386	·0361	·0319	·0345
10	·0391	·0386	·0380	.0400	·0426	·0441	·0398	·0417	·0387	·0361	·0318	·0342
11	·0391	·0386	·0382	.0400	·0427	·0440	·0397	·0420	·0392	·0362	·0318	·0342
12	·0393	·0389	·0386	.0400	·0431	·0444	·0401	·0427	·0397	·0365	·0321	·0342
13	·0393	·0391	·0386	.0407	·0434	·0449	·0406	·0430	·0403	·0368	·0324	·0345
14	·0393	·0393	·0388	.0411	·0436	·0454	·0410	·0435	·0407	·0368	·0327	·0348
15	·0394	·0400	·0391	.0417	·0440	·0452	·0420	·0438	·0410	·0371	·0333	·0352
16	·0395	·0403	·0392	.0422	·0441	·0452	·0419	·0440	·0410	·0374	·0338	·0356
17	·0396	·0404	·0395	.0424	·0440	·0452	·0422	·0441	·0407	·0378	·0340	·0359
18	·0396	·0406	·0398	.0424	·0439	·0450	·0421	·0440	·0404	·0378	·0341	·0362
19	·0397	·0408	·0400	.0423	·0436	·0449	·0419	·0438	·0404	·0380	·0343	·0364
20	·0397	·0410	·0401	.0423	·0434	·0448	·0419	·0437	·0402	·0380	·0343	·0366
21	·0397	·0407	·0400	·0421	·0433	·0449	·0420	·0436	·0404	·0380	·0343	·0366
22	·0400	·0406	·0401	·0423	·0432	·0446	·0422	·0438	·0406	·0383	·0342	·0367
23	·0404	·0410	·0403	·0421	·0429	·0445	·0422	·0440	·0411	·0387	·0344	·0366

1852.

0	0·0357	0·0383	0·0379	0·0397	0·0414	0·0424	0·0404	0·0480	0·0469	0·0437	0·0397	0·0391
1	·0360	·0390	·0381	·0396	·0413	·0419	·0402	·0479	·0467	·0438	·0402	·0395
2	·0361	·0391	·0380	·0392	·0405	·0415	·0400	·0474	·0463	·0436	·0405	·0396
3	·0356	·0386	·0374	·0393	·0401	·0409	·0404	·0468	·0456	·0430	·0408	·0391
4	·0349	·0379	·0371	·0394	·0403	·0404	·0408	·0462	·0449	·0424	·0406	·0386
5	·0344	·0373	·0368	·0394	·0404	·0401	·0412	·0458	·0443	·0420	·0401	·0380
6	·0341	·0375	·0366	·0392	·0403	·0400	·0414	·0457	·0438	·0416	·0392	·0377
7	·0337	·0373	·0367	·0388	·0400	·0399	·0412	·0455	·0435	·0413	·0394	·0376
8	·0336	·0368	·0363	·0385	·0398	·0398	·0409	·0453	·0434	·0411	·0392	·0375
9	·0336	·0364	·0359	·0379	·0397	·0399	·0405	·0451	·0432	·0408	·0392	·0375
10	·0337	·0361	·0357	·0374	·0394	·0400	·0404	·0450	·0431	·0407	·0392	·0375
11	·0337	·0358	·0358	·0375	·0394	·0400	·0405	·0451	·0433	·0408	·0393	·0376
12	·0339	·0357	·0360	·0378	·0398	·0403	·0411	·0451	·0435	·0410	·0391	·0374
13	·0336	·0359	·0363	·0381	·0400	·0407	·0415	·0457	·0439	·0412	·0391	·0376
14	·0339	·0358	·0367	·0386	·0405	·0414	·0417	·0462	·0443	·0415	·0391	·0378
15	·0342	·0362	·0374	·0391	·0411	·0419	·0416	·0467	[illegible]	·0414	·0391	·0379
16	·0345	·0368	·0377	·0396	·0416	·0425	·0412	·0472	·0456	·0421	·0393	·0382
17	·0346	·0370	·0378	·0397	·0418	·0427	·0408	·0475	·0460	·0425	·0395	·0383
18	·0347	·0371	·0377	·0395	·0417	·0429	·0404	·0476	·0462	·0428	·0396	·0386
19	·0348	·0371	·0377	·0394	·0416	·0430	·0405	·0477	·0463	·0431	·0398	·0386
20	·0349	·0371	·0377	·0392	·0414	·0432	·0399	·0475	·0464	·0433	·0396	·0385
21	·0348	·0370	·0375	·0390	·0414	·0435	·0399	·0476	·0466	·0432	·0395	·0387
22	·0351	·0374	·0377	·0394	·0414	·0433	·0404	·0479	·0466	·0433	·0398	·0386
23	·0353	·0377	·0378	·0397	·0412	·0431	·0406	·0478	·0466	·0434	·0399	·0387

TABLE XIV.—MEAN MONTHLY DETERMINATION of the VERTICAL MAGNETIC FORCE, &c.—*continued.*

Hour. Gottingen Mean Solar Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
						1853.						
0	..	0·0357	0·0341	0·0363	0·0400	0·0412	0·0453	0·0443	0·0417	0·0395	0·0366	0·0347
1	..	·0358	·0343	·0364	·0400	·0409	·0449	·0440	·0415	·0395	·0367	·0352
2	..	·0356	·0340	·0358	·0395	·0405	·0445	·0433	·0409	·0392	·0367	·0354
3	..	·0350	·0332	·0353	·0397	·0402	·0440	·0427	·0406	·0385	·0363	·0352
4	..	·0342	·0323	·0344	·0394	·0402	·0438	·0418	·0399	·0377	·0356	·0344
5	..	·0330	·0311	·0340	·0395	·0401	·0436	·0418	·0393	·0373	·0349	·0339
6	..	·0328	·0304	·0338	·0396	·0401	·0436	·0416	·0389	·0369	·0343	·0334
7	..	·0320	·0301	·0337	·0394	·0401	·0433	·0411	·0386	·0368	·0340	·0329
8	..	·0313	·0297	·0335	·0395	·0400	·0428	·0414	·0387	·0364	·0336	·0327
9	..	·0309	·0294	·0331	·0394	·0400	·0424	·0413	·0385	·0363	·0334	·0326
10	..	·0310	·0291	·0329	·0392	·0398	·0420	·0413	·0384	·0361	·0333	·0325
11	..	·0311	·0291	·0332	·0392	·0399	·0417	·0415	·0385	·0363	·0332	·0326
12	..	·0313	·0293	·0334	·0396	·0397	·0412	·0419	·0386	·0363	·0334	·0327
13	..	·0317	·0296	·0340	·0400	·0400	·0415	·0425	·0390	·0365	·0334	·0328
14	..	·0317	·0300	·0342	·0405	·0406	·0422	·0430	·0392	·0366	·0337	·0329
15	.	·0322	·0307	·0347	·0406	·0411	·0425	·0433	·0396	·0374	·0339	·0331
16	..	·0327	·0316	·0352	·0409	·0416	·0437	·0438	·0398	·0374	·0343	·0333
17	..	·0332	·0323	·0356	·0411	·0419	·0442	·0440	·0397	·0378	·0346	·0335
18	..	·0337	·0329	·0358	·0409	·0419	·0445	·0442	·0402	·0381	·0348	·0342
19	..	·0340	·0335	·0361	·0409	·0419	·0447	·0443	·0404	·0384	·0353	·0338
20	..	·0343	·0340	·0364	·0408	·0420	·0449	·0443	·0406	·0385	·0354	·0340
21	..	·0345	·0341	·0365	·0406	·0421	·0450	·0443	·0409	·0387	·0357	·0341
22	..	·0348	·0344	·0364	·0404	·0420	·0453	·0444	·0410	·0388	·0359	·0343
23	..	·0351	·0346	·0366	·0402	·0420	·0453	·0445	·0415	·0389	·0361	·0347
						1854.						
0	0·0388	0·0403	0·0409	0·0442	0·0447	0·0450	0·0432	0·0438	0·0417	0·0400	0·0363	0·0357
1	·0389	·0405	·0414	·0444	·0445	·0447	·0428	·0437	·0414	·0389	·0368	·0361
2	·0388	·0407	·0416	·0445	·0441	·0440	·0419	·0420	·0407	·0389	·0369	·0363
3	·0387	·0404	·0413	·0441	·0432	·0432	·0412	·0418	·0401	·0385	·0365	·0362
4	·0380	·0397	·0404	·0436	·0425	·0428	·0408	·0409	·0395	·0376	·0355	·0358
5	·0376	·0389	·0393	·0431	·0421	·0422	·0404	·0407	·0390	·0370	·0345	·0352
6	·0373	·0385	·0386	·0429	·0420	·0418	·0402	·0407	·0389	·0366	·0337	·0345
7	·0367	·0379	·0383	·0426	·0416	·0418	·0401	·0405	·0387	·0362	·0331	·0339
8	·0364	·0376	·0382	·0425	·0413	·0417	·0397	·0404	·0386	·0362	·0329	·0335
9	·0364	·0374	·0379	·0423	·0411	·0418	·0392	·0403	·0386	·0359	·0327	·0335
10	·0364	·0376	·0377	·0418	·0408	·0416	·0389	·0402	·0385	·0357	·0326	·0336
11	·0367	·0376	·0377	·0415	·0406	·0414	·0389	·0402	·0388	·0353	·0326	·0337
12	·0366	·0379	·0378	·0416	·0409	·0415	·0394	·0404	·0390	·0354	·0329	·0339
13	·0363	·0379	·0379	·0417	·0413	·0420	·0399	·0407	·0396	·0356	·0331	·0342
14	·0370	·0383	·0383	·0419	·0417	·0424	·0405	·0412	·0403	·0359	·0335	·0345
15	·0370	·0390	·0389	·0423	·0425	·0431	·0412	·0417	·0406	·0364	·0338	·0349
16	·0376	·0394	·0397	·0423	·0435	·0439	·0418	·0423	·0411	·0368	·0341	·0352
17	·0378	·0397	·0402	·0429	·0444	·0443	·0424	·0427	·0412	·0360	·0348	·0354
18	·0382	·0398	·0410	·0432	·0449	·0447	·0427	·0429	·0412	·0376	·0350	·0355
19	·0385	·0400	·0412	·0425	·0450	·0449	·0427	·0431	·0411	·0379	·0353	·0355
20	·0388	·0401	·0413	·0426	·0451	·0450	·0429	·0431	·0411	·0380	·0355	·0357
21	·0391	·0403	·0414	·0423	·0451	·0455	·0430	·0431	·0412	·0382	·0358	·0358
22	·0392	·0403	·0410	·0429	·0452	·0453	·0433	·0434	·0415	·0386	·0361	·0358
23	·0391	·0405	·0407	·0434	·0451	·0454	·0435	·0435	·0418	·0389	·0360	·0359

TABLE XIV.—MEAN MONTHLY DETERMINATIONS of the VERTICAL MAGNETIC FORCE, &c.—*continued.*

1855.

Hour. Göttingen Mean Solar Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
0	0·0364	0·0349	0·0384	0·0395	0·0396	0·0422	0·0445	0·0439	0·0422	0·0373	0·0348	0·0340
1	·0365	·0349	·0385	·0400	·0395	·0418	·0438	·0434	·0415	·0373	·0351	·0339
2	·0363	·0347	·0383	·0396	·0393	·0413	·0431	·0426	·0413	·0370	·0352	·0339
3	·0359	·0341	·0372	·0390	·0390	·0408	·0420	·0415	·0399	·0363	·0345	·0333
4	·0349	·0333	·0364	·0386	·0387	·0404	·0416	·0411	·0394	·0354	·0336	·0325
5	·0342	·0326	·0353	·0383	·0385	·0400	·0416	·0411	·0390	·0347	·0330	·0316
6	·0338	·0321	·0348	·0384	·0381	·0397	·0414	·0410	·0386	·0344	·0326	·0311
7	·0333	·0316	·0344	·0380	·0376	·0395	·0412	·0408	·0384	·0340	·0323	·0307
8	·0330	·0313	·0343	·0382	·0374	·0395	·0409	·0405	·0382	·0338	·0321	·0306
9	·0330	·0311	·0340	·0381	·0372	·0394	·0403	·0402	·0380	·0336	·0322	·0304
10	·0331	·0313	·0340	·0380	·0370	·0393	·0401	·0402	·0380	·0335	·0319	·0304
11	·0333	·0314	·0340	·0380	·0369	·0394	·0405	·0406	·0384	·0334	·0321	·0304
12	·0334	·0317	·0342	·0381	·0367	·0400	·0410	·0411	·0390	·0337	·0320	·0304
13	·0336	·0323	·0347	·0384	·0374	·0405	·0419	·0418	·0399	·0338	·0323	·0307
14	·0339	·0328	·0352	·0388	·0377	·0410	·0426	·0425	·0401	·0343	·0325	·0310
15	·0341	·0332	·0358	·0393	·0382	·0417	·0437	·0431	·0409	·0346	·0327	·0314
16	·0344	·0337	·0364	·0397	·0386	·0425	·0442	·0437	·0412	·0350	·0330	·0318
17	·0346	·0340	·0370	·0399	·0392	·0428	·0446	·0438	·0414	·0353	·0332	·0321
18	·0347	·0343	·0374	·0401	·0396	·0430	·0449	·0439	·0414	·0357	·0335	·0325
19	·0350	·0345	·0379	·0402	·0398	·0430	·0449	·0439	·0414	·0360	·0337	·0328
20	·0351	·0346	·0381	·0402	·0399	·0431	·0449	·0440	0·413	·0361	·0339	·0331
21	·0354	·0347	·0381	·0401	·0399	·0434	·0449	·0441	·0417	·0365	·0342	·0331
22	·0357	·0348	·0382	·0402	·0398	·0433	·0450	·0443	·0419	·0366	·0343	·0333
23	·0361	·0350	·0384	·0402	·0395	·0430	·0448	·0445	·0424	·0368	·0345	·0334

1856.

Hour. Göttingen Mean Solar Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
0	0·0369	0·0380	0·0377	0·0401	0·0399	0·0427	0·0362	0·0347	0·0306	0·0294	0·0263	0·0259
1	·0368	·0381	·0379	·0401	·0399	·0416	·0355	·0343	·0305	·0294	·0264	·0257
2	·0366	·0381	·0380	·0399	·0393	·0411	·0346	·0338	·0301	·0288	·0263	·0261
3	·0360	·0375	·0374	·0396	·0386	·0402	·0341	·0332	·0287	·0284	·0264	·0261
4	·0351	·0368	·0367	·0384	·0382	·0399	·0341	·0326	·0273	·0291	·0254	·0262
5	·0345	·0359	·0360	·0383	·0375	·0392	·0340	·0322	·0261	·0280	·0248	·0258
6	·0340	·0353	·0353	·0380	·0372	·0390	·0340	·0319	·0255	·0276	·0243	·0252
7	·0338	·0349	·0349	·0376	·0366	·0388	·0338	·0314	·0251	·0275	·0241	·0248
8	·0339	·0345	·0346	·0374	·0361	·0381	·0335	·0314	·0247	·0274	·0239	·0248
9	·0338	·0346	·0344	·0372	·0359	·0386	·0331	·0308	·0248	·0273	·0236	·0246
10	·0339	·0346	·0344	·0370	·0359	·0386	·0329	·0308	·0247	·0272	·0238	·0247
11	·0339	·0346	·0344	·0369	·0360	·0387	·0330	·0310	·0248	·0271	·0237	·0248
12	·0342	·0345	·0346	·0372	·0368	·0392	·0333	·0315	·0252	·0271	·0238	·0246
13	·0341	·0348	·0349	·0375	·0367	·0396	·0339	·0323	·0258	·0273	·0245	·0250
14	·0342	·0352	·0351	·0380	·0376	·0401	·0345	·0326	·0264	·0275	·0242	·0249
15	·0346	·0355	·0356	·0385	·0380	·0408	·0348	·0331	·0271	·0279	·0246	·0249
16	·0348	·0358	·0359	·0392	·0389	·0414	·0353	·0335	·0277	·0282	·0247	·0253
17	·0351	·0361	·0364	·0398	·0394	·0418	·0355	·0338	·0286	·0286	·0248	·0254
18	·0353	·0365	·0368	·0403	·0398	·0421	·0359	·0340	·0289	·0289	·0251	·0256
19	·0355	·0368	·0372	·0404	·0400	·0424	·0358	·0341	·0297	·0291	·0252	·0256
20	·0358	·0373	·0375	·0403	·0403	·0426	·0360	·0342	·0296	·0294	·0253	·0257
21	·0360	·0375	·0376	·0404	·0404	·0428	·0363	·0344	·0299	·0295	·0255	·0259
22	·0364	·0377	·0375	·0403	·0403	·0430	·0365	·0346	·0301	·0296	·0257	·0262
23	·0368	·0380	·0375	·0404	·0402	·0426	·0365	·0349	·0306	·0295	·0259	·0261

TABLE XIV.—MEAN MONTHLY DETERMINATION of the VERTICAL MAGNETIC FORCE, &c.—*concluded.*

1857.

Hour. Göttingen Mean Solar Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
0	0·0268	0·0303	0·0307	0·0313	0·0330	0·0333	0·0308	0·0317	0·0280	0·0272	..	0·0253
1	·0269	·0304	·0308	·0313	·0327	·0326	·0297	·0311	·0276	·0271	..	·0262
2	·0264	·0299	·0308	·0311	·0324	·0324	·0289	·0303	·0266	·0269	..	·0261
3	·0263	·0298	·0303	·0307	·0317	·0312	·0280	·0297	·0256	·0263	..	·0259
4	·0258	·0291	·0299	·0303	·0313	·0308	·0273	·0294	·0258	·0257	..	·0255
5	·0254	·0284	·0293	·0299	·0312	·0304	·0271	·0293	·0253	·0250	..	·0251
6	·0250	·0277	·0287	·0297	·0313	·0301	·0271	·0292	·0251	·0245	..	·0246
7	·0246	·0271	·0284	·0291	·0312	·0299	·0273	·0289	·0249	·0242	..	·0249
8	·0245	·0268	·0281	·0286	·0312	·0296	·0270	·0286	·0249	·0238	..	·0249
9	·0243	·0267	·0282	·0285	·0311	·0297	·0266	·0284	·0250	·0234	..	·0248
10	·0241	·0268	·0282	·0284	·0311	·0297	·0265	·0283	·0251	·0234	..	·0248
11	·0241	·0268	·0282	·0284	·0313	·0303	·0268	·0288	·0252	·0234	..	·0249
12	·0244	·0270	·0283	·0286	·0316	·0311	·0274	·0295	·0255	·0234	..	·0249
13	·0244	·0272	·0284	·0288	·0325	·0321	·0286	·0303	·0259	·0237	..	·0250
14	·0245	·0276	·0287	·0292	·0328	·0331	·0296	·0314	·0266	·0242	..	·0252
15	·0246	·0281	·0289	·0296	·0333	·0336	·0304	·0319	·0269	·0248	..	·0251
16	·0247	·0285	·0293	·0302	·0338	·0344	·0309	·0322	·0272	·0254	..	·0253
17	·0250	·0290	·0297	·0306	·0341	·0344	·0313	·0324	·0274	·0257	..	·0254
18	·0252	·0296	·0300	·0314	·0340	·0343	·0314	·0324	·0276	·0259	..	·0254
19	·0253	·0298	·0303	·0317	·0338	·0343	·0314	·0325	·0277	·0264	..	·0255
20	·0255	·0300	·0306	·0324	·0336	·0343	·0313	·0322	·0276	·0265	..	·0255
21	·0257	·0303	·0307	·0321	·0335	·0342	·0315	·0322	·0278	·0265	..	·0256
22	·0260	·0304	·0307	·0315	·0332	·0340	·0316	·0321	·0276	·0267	..	·0255
23	·0262	·0306	·0308	·0315	·0330	·0339	·0315	·0321	·0278	·0270	..	·0256

TABLE XV.—MEAN, through the RANGE of YEARS, of the MONTHLY MEAN DETERMINATIONS of the DIURNAL INEQUALITY of VERTICAL FORCE ; exhibited separately for the different Months.

1849 to 1857.

Hour. Göttingen Mean Solar Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
0	+0·00116	+0·00130	+0·00114	+0·00093	+0·00056	+0·00076	+0·00100	+0·00131	+0·00174	+0·00171	+0·00121	+0·00083
1	+ 120	+ 148	+ 136	+ 100	+ 41	+ 34	+ 57	+ 108	+ 148	+ 154	+ 134	+ 107
2	+ 113	+ 144	+ 152	+ 76	+ 8	+ 3	+ 10	+ 48	+ 111	+ 128	+ 153	+ 112
3	+ 93	+ 117	+ 106	+ 51	− 21	− 46	− 17	+ 4	+ 36	+ 78	+ 125	+ 93
4	+ 30	+ 55	+ 52	+ 9	− 43	− 64	− 40	− 61	− 23	+ 28	+ 56	+ 51
5	− 19	− 17	− 19	− 16	− 52	− 91	− 46	− 83	− 84	− 31	− 6	+ 12
6	− 49	− 46	− 64	− 32	− 56	− 107	− 48	− 100	− 123	− 60	− 55	− 39
7	− 91	− 87	− 91	− 68	− 84	− 121	− 70	− 129	− 150	− 87	− 84	− 71
8	− 104	− 128	− 123	− 91	− 93	− 136	− 94	− 140	− 163	− 114	− 114	− 87
9	− 110	− 149	− 150	− 128	− 112	− 128	− 136	− 161	− 182	− 139	− 129	− 98
10	− 95	− 143	− 162	− 154	− 133	− 138	− 161	− 174	− 188	− 153	− 133	− 103
11	− 86	− 148	− 160	− 153	− 134	− 132	− 161	− 158	− 167	− 156	− 130	− 99
12	− 71	− 136	− 143	− 134	− 103	− 98	− 127	− 120	− 136	− 137	− 118	− 100
13	− 68	− 109	− 124	− 103	− 66	− 52	− 78	− 70	− 81	− 120	− 91	− 74
14	− 51	− 86	− 93	− 68	− 27	− 3	− 26	− 16	− 40	− 88	− 74	− 56
15	− 36	− 43	− 48	− 19	+ 20	+ 46	+ 29	+ 28	+ 9	− 42	− 45	− 37
16	− 16	− 6	− 11	+ 28	+ 71	+ 96	+ 64	+ 70	+ 42	− 11	− 14	− 8
17	0	+ 21	+ 32	+ 64	+ 108	+ 110	+ 93	+ 98	+ 68	+ 9	+ 11	+ 11
18	+ 14	+ 46	+ 63	+ 87	+ 118	+ 117	+ 102	+ 110	+ 83	+ 46	+ 29	+ 33
19	+ 25	+ 61	+ 91	+ 78	+ 116	+ 117	+ 100	+ 114	+ 100	+ 73	+ 46	+ 39
20	+ 40	+ 78	+ 111	+ 84	+ 111	+ 119	+ 96	+ 108	+ 100	+ 86	+ 54	+ 48
21	+ 56	+ 87	+ 110	+ 71	+ 104	+ 137	+ 103	+ 110	+ 123	+ 93	+ 71	+ 58
22	+ 79	+ 98	+ 113	+ 83	+ 89	+ 128	+ 124	+ 129	+ 137	+ 111	+ 83	+ 64
23	+ 99	+ 121	+ 116	+ 94	+ 71	+ 117	+ 128	+ 140	+ 172	+ 132	+ 94	+ 73

TABLE XVI.—MEAN, through the RANGE of MONTHS, of the MONTHLY MEAN DETERMINATIONS of the DIURNAL IRREGULARITY of VERTICAL FORCE exhibited separately for the different Years.

Hour. Gottingen Mean Solar Time.	January to December									Mean 1849 to 1857.	Mean in Terms of Horizontal Force.
	1849	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.		
0	+ 0·0002	+ 0·0010	+ 0·0008	+ 0·0009	+ 0·0013	+ 0·0016	+ 0·0015	+ 0·0016	+ 0·0011	+ 0·00105	+ 0·00271
1	+ 3	+ 11	+ 7	+ 10	+ 13	+ 15	+ 14	+ 14	+ 9	+ 96	+ 247
2	+ 5	+ 10	+ 5	+ 8	+ 10	+ 12	+ 11	+ 11	+ 6	+ 78	+ 201
3	+ 7	+ 8	+ 2	+ 4	+ 6	+ 8	+ 4	+ 6	0	+ 45	+ 116
4	+ 5	+ 3	− 1	+ 1	0	+ 1	− 3	+ 1	− 4	+ 3	+ 8
5	+ 4	− 1	− 4	− 2	− 4	− 5	− 8	− 6	− 7	− 33	− 85
6	+ 2	− 4	− 5	− 4	− 7	− 9	− 11	− 10	− 10	− 58	− 149
7	0	− 8	− 7	− 6	− 9	− 12	− 14	− 13	− 12	− 81	− 208
8	− 3	− 9	− 9	− 9	− 12	− 13	− 16	− 16	− 14	− 101	− 260
9	− 5	− 13	− 11	− 11	− 14	− 16	− 18	− 17	− 15	− 120	− 309
10	− 6	− 15	− 12	− 12	− 15	− 17	− 19	− 17	− 15	− 128	− 336
11	− 6	− 16	− 11	− 11	− 14	− 18	− 17	− 17	− 14	− 110	− 283
12	− 4	− 14	− 8	− 10	− 13	− 16	− 15	− 14	− 11	− 105	− 270
13	− 4	− 10	− 4	− 7	− 10	− 13	− 10	− 11	− 7	− 76	− 196
14	− 3	− 6	− 2	− 4	− 7	− 9	− 6	− 7	− 2	− 46	− 118
15	− 1	− 2	+ 3	0	− 4	− 4	0	− 3	+ 2	− 9	− 23
16	0	+ 2	+ 5	+ 3	+ 1	+ 2	+ 4	+ 1	+ 5	+ 23	+ 59
17	+ 2	+ 5	+ 6	+ 5	+ 4	+ 5	+ 8	+ 5	+ 8	+ 48	+ 124
18	+ 2	+ 7	+ 6	+ 5	+ 6	+ 9	+ 10	+ 8	+ 10	+ 63	+ 162
19	+ 1	+ 7	+ 6	+ 6	+ 8	+ 10	+ 12	+ 10	+ 11	+ 71	+ 183
20	+ 1	+ 7	+ 6	+ 5	+ 10	+ 11	+ 13	+ 12	+ 12	+ 77	+ 198
21	+ 1	+ 8	+ 6	+ 5	+ 11	+ 12	+ 14	+ 14	+ 12	+ 83	+ 214
22	+ 1	+ 9	+ 7	+ 7	+ 12	+ 14	+ 15	+ 16	+ 12	+ 93	+ 240
23	+ 1	+ 11	+ 8	+ 8	+ 13	+ 15	+ 16	+ 17	+ 12	+ 101	+ 260

REDUCTIONS OF MAGNETIC OBSERVATIONS REFERRED TO THE MOON'S PLACE.

REDUCTIONS OF MAGNETIC DECLINATION REFERRED TO THE MOON'S PLACE.

TABLE XVII.—MEAN LUNATION-INEQUALITY of the WESTERN DECLINATION of the MAGNET, exhibited separately for the different Years; with the Mean for all the Years, corrected for the Daily Proportion of Secular Change of Western Declination.

Day of the Lunation.	Mean Lunation-Inequality in each Year.										Mean 1848 to 1857.	Mean corrected by −0′·17.
	1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.		
	′	′	′	′	′	′	′	′	′	′	′	′
1	+ 1·2	+ 0·2	+ 1·2	− 0·6	− 0·3	+ 0·2	+ 0·5	− 1·6	+ 0·5	+ 0·9	+ 0·22	+ 0·05
2	+ 0·5	− 0·1	+ 0·2	− 0·7	0·0	+ 0·6	− 0·1	− 0·5	+ 0·1	− 0·4	− 0·04	− 0·21
3	+ 0·6	− 0·5	+ 0·9	− 1·3	+ 0·4	+ 1·1	+ 1·0	+ 0·1	+ 0·2	0·0	+ 0·25	+ 0·08
4	+ 0·1	+ 1·3	+ 0·1	− 0·4	− 0·5	+ 1·4	+ 0·7	+ 0·1	+ 0·9	+ 0·7	+ 0·44	+ 0·27
5	− 0·1	− 0·1	+ 0·4	0·0	− 0·9	+ 1·1	+ 0·5	− 1·1	+ 1·8	− 0·2	+ 0·14	− 0·03
6	− 0·3	− 0·2	+ 0·3	− 0·5	+ 0·8	+ 0·9	+ 2·0	+ 0·2	+ 0·8	− 0·6	+ 0·34	+ 0·17
7	+ 0·5	− 0·1	+ 0·1	+ 0·8	+ 0·5	+ 1·5	+ 0·8	+ 0·3	+ 0·4	− 0·5	+ 0·43	+ 0·26
8	− 0·2	+ 1·5	0·0	+ 0·2	+ 0·1	+ 0·4	+ 0·1	− 0·4	+ 0·4	− 0·8	+ 0·13	− 0·04
9	+ 0·2	+ 1·0	− 1·0	− 0·1	+ 0·5	− 0·1	+ 1·2	+ 0·3	+ 0·9	− 0·1	+ 0·28	+ 0·11
10	0·0	+ 0·2	− 0·4	− 0·5	+ 1·6	+ 0·5	+ 0·4	− 0·3	+ 0·6	− 0·8	+ 0·13	− 0·04
11	− 0·6	+ 2·3	− 0·5	− 0·1	− 0·1	+ 0·2	+ 1·7	+ 0·1	+ 2·0	− 1·0	+ 0·40	+ 0·23
12	− 1·0	− 0·3	− 0·5	0·0	− 0·7	+ 0·2	− 0·4	0·0	+ 1·1	− 0·3	− 0·19	− 0·36
13	− 0·2	+ 1·7	− 0·9	− 0·3	− 0·3	+ 0·4	+ 0·8	− 0·7	− 0·1	− 0·6	− 0·08	− 0·25
14	− 0·6	+ 3·0	− 0·7	− 0·2	− 0·2	+ 0·5	− 0·1	− 0·7	+ 1·5	− 0·9	+ 0·16	− 0·01
15	− 0·5	+ 2·5	− 0·1	− 0·3	− 0·2	− 0·9	− 0·2	− 0·5	+ 0·4	− 0·2	0·00	− 0·17
16	+ 0·2	+ 3·9	− 0·5	+ 0·3	+ 0·3	− 0·1	− 0·4	− 0·8	− 0·1	− 0·4	+ 0·24	+ 0·07
17	+ 0·4	+ 1·4	− 0·3	− 0·1	− 0·2	0·0	− 0·5	− 0·9	− 0·9	0·0	− 0·11	− 0·28
18	− 0·2	+ 1·5	+ 0·2	− 0·9	0·0	− 0·3	− 0·6	− 0·1	− 0·3	0·0	− 0·07	− 0·24
19	+ 0·7	+ 1·3	+ 0·3	− 0·4	− 0·3	+ 0·4	+ 0·5	+ 0·4	− 0·2	+ 1·2	+ 0·39	+ 0·22
20	+ 0·4	+ 2·0	0·0	+ 0·3	+ 1·5	+ 0·8	− 0·2	− 0·7	+ 0·6	+ 1·2	+ 0·59	+ 0·42
21	− 0·3	+ 0·1	− 0·1	+ 0·1	+ 1·9	+ 0·1	− 0·1	− 0·9	− 0·7	+ 1·1	+ 0·12	− 0·05
22	+ 0·3	− 1·9	− 1·5	− 0·3	+ 1·3	+ 0·3	− 0·8	− 0·1	− 0·4	+ 0·2	− 0·29	− 0·46
23	+ 0·2	− 1·2	− 0·5	+ 0·4	− 0·3	− 0·8	− 1·0	0·0	− 0·2	+ 2·4	− 0·10	− 0·27
24	− 0·1	− 0·2	− 0·3	+ 0·5	+ 0·2	− 0·6	− 0·8	− 0·4	+ 0·3	+ 1·7	+ 0·03	− 0·14
25	− 0·9	+ 1·3	+ 0·5	+ 0·6	+ 0·9	0·0	0·0	+ 0·7	− 0·1	+ 2·3	+ 0·39	+ 0·22
26	− 0·4	+ 1·0	+ 0·9	+ 0·1	+ 0·5	− 0·9	− 0·3	+ 0·3	0·0	+ 0·9	+ 0·21	+ 0·04
27	− 0·7	+ 0·8	+ 1·1	+ 0·1	+ 0·8	− 0·2	− 0·3	+ 0·8	+ 0·3	+ 0·6	+ 0·33	+ 0·16
28	+ 0·1	+ 1·4	+ 0·7	+ 0·7	− 0·3	− 0·2	+ 0·7	− 0·3	− 0·3	+ 1·0	+ 0·35	+ 0·18
29	+ 0·5	− 2·5	+ 1·3	+ 0·2	+ 0·8	+ 0·1	+ 1·3	− 0·1	− 0·2	+ 1·4	+ 0·28	+ 0·11

TABLE XVIII.—MEAN LUNATION-DETERMINATION of the WESTERN DECLINATION of the MAGNET at every LUNAR HOUR of the LUNAR DAY; obtained by taking the Means of all the Determinations at the same Lunar Hour through the Lunation.

1848.

Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.

Lunar Hour.	January. d h m 6. 0. 43	February. d h m 5. 1. 14	March. d h m 5. 0. 47	April. d h m 4. 1. 16	May. d h m 3. 0. 53	June d h m 2. 1. 34	July. d h m 1. 1. 15	July. d h m 30. 0. 53	August. d h m 29. 1. 12	September. d h m 28. 1. 21	October. d h m 27. 0. 45	November. d h m 26. 0. 59	December. d h m 26. 1. 20	Mean.
	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°
	′	′	′	′	′	′	′	′	′	′	′	′	′	′
0	48·6	50·3	51·7	51·5	54·0	53·5	53·4	57·0	52·3	53·6	52·2	52·0	43·9	51·8
1	49·3	49·0	53·4	51·2	53·8	53·4	53·9	56·7	51·8	53·2	52·2	52·0	44·8	51·5
2	49·4	49·2	54·2	51·5	52·9	53·4	54·9	56·0	51·7	52·8	51·7	52·1	45·5	51·9
3	50·4	49·4	55·9	50·9	52·6	53·5	54·3	55·0	51·6	53·0	51·9	52·6	45·9	52·1
4	50·7	49·4	56·2	51·9	52·5	53·9	53·3	55·4	51·1	52·0	50·6	51·8	46·2	51·9
5	50·8	49·3	57·3	52·0	52·6	53·2	52·9	55·5	51·0	50·8	49·5	51·9	47·0	51·8
6	51·4	48·8	56·7	52·5	52·8	53·9	53·3	55·6	51·2	50·8	49·9	51·5	47·2	52·0
7	51·6	48·6	57·0	51·8	52·7	54·4	52·8	55·5	51·2	50·8	50·6	51·5	47·8	52·0
8	51·7	48·7	57·1	52·0	53·2	54·0	53·3	55·3	50·8	51·7	50·2	51·3	47·8	52·1
9	51·4	48·3	57·7	52·5	53·6	53·6	53·6	55·0	50·8	51·8	49·9	51·8	47·7	52·1
10	51·0	48·6	56·9	52·2	53·1	53·7	54·0	55·0	51·5	51·7	50·6	51·6	47·6	52·1
11	51·2	48·8	57·1	52·6	53·3	53·7	53·9	52·1	51·6	52·6	50·3	51·2	47·2	52·0
12	51·3	48·6	56·6	51·9	53·7	54·3	54·6	52·5	51·7	52·3	49·3	51·5	47·2	52·0
13	51·9	49·2	54·6	51·8	52·9	53·8	54·0	52·6	51·7	52·2	49·1	52·0	47·6	51·8
14	51·4	49·8	52·8	52·4	53·6	53·6	54·1	51·6	51·2	52·2	49·1	50·9	47·0	51·5
15	51·7	49·7	52·0	53·2	53·4	54·0	53·7	51·3	51·1	51·7	50·3	51·8	46·3	51·6
16	50·1	49·6	51·5	53·1	53·1	53·6	54·8	52·0	51·2	51·7	50·0	51·8	46·4	51·5
17	49·1	49·6	52·4	52·8	53·8	53·2	54·8	51·3	51·4	51·8	50·4	52·2	45·9	51·4
18	49·1	49·4	51·9	52·7	53·4	53·3	54·5	51·3	51·4	52·2	51·4	51·7	45·6	51·4
19	48·1	49·6	51·7	52·8	52·9	53·7	53·5	51·2	51·4	52·3	51·1	51·9	45·3	51·2
20	47·0	49·2	52·4	52·1	51·9	54·7	53·4	51·9	51·3	52·8	51·0	51·4	44·2	51·0
21	46·6	49·2	52·1	51·1	51·9	53·8	53·5	52·4	51·8	53·4	51·0	52·4	44·1	51·0
22	47·2	48·9	52·6	50·8	52·2	54·3	54·5	52·4	51·8	52·7	51·4	51·7	44·1	51·1
23	47·6	48·7	53·5	50·3	53·3	54·2	54·5	53·3	52·2	53·2	52·7	51·5	43·5	51·4

1849.

Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.

Lunar Hour.	January. d h m 24. 0. 54	February. d h m 23. 1. 15	March. d h m 24. 0. 45	April. d h m 23. 1. 12	May. d h m 22. 0. 52	June. d h m 21. 1. 38	July. d h m, 20. 1. 20	August. d h m 18. 0 57.	September d h m 17. 1. 18	October. d h m 16. 0. 44	November. d h m 15. 0. 58	December. d h m 15. 1. 17	Mean.
	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°
	′	′	′	′	′	′	′	′	′	′	′	′	′
0	44·8	43·8	42·1	42·7	40·8	41·0	41·7	31·4	29·0	31·6	29·3	31·0	37·4
1	45·5	44·4	42·7	42·4	41·3	40·8	41·9	29·9	29·0	30·9	29·2	29·4	37·3
2	45·5	44·7	43·4	42·7	41·2	41·0	41·8	31·3	28·8	30·5	29·4	29·1	37·4
3	45·5	44·1	43·4	41·7	40·9	40·9	41·4	31·4	28·2	30·8	29·7	28·9	37·2
4	45·4	43·9	43·1	42·0	40·7	40·5	40·5	29·9	27·4	29·8	29·9	28·5	36·8
5	45·1	43·0	42·1	40·7	39·8	40·6	40·1	30·3	28·1	30·0	29·4	26·5	36·3
6	45·1	42·2	41·4	40·0	40·2	40·6	40·6	30·9	27·1	30·1	30·0	26·8	36·3
7	44·8	41·6	41·6	40·7	39·6	40·5	40·6	30·4	26·3	30·4	30·0	27·2	36·1
8	44·9	42·8	41·8	39·7	40·1	40·3	40·6	29·7	26·1	30·5	30·2	27·6	36·2
9	44·6	43·7	42·6	40·4	40·4	41·1	40·3	29·4	26·3	29·7	29·9	26·6	36·3
10	45·0	44·6	42·7	40·8	40·5	41·0	39·8	29·8	25·7	29·6	30·4	27·7	36·5
11	44·5	44·5	43·4	41·7	41·1	41·1	40·5	30·9	25·6	30·3	30·3	27·6	36·8
12	44·0	44·2	43·6	41·9	41·5	41·0	40·8	30·4	26·1	31·1	30·5	28·2	36·9
13	43·9	44·9	43·9	42·1	42·2	41·7	39·6	30·3	26·5	30·4	30·3	29·2	37·1
14	43·8	43·3	43·9	41·9	42·5	41·5	39·5	31·3	27·3	30·6	30·0	29·5	37·1
15	43·5	43·3	42·8	41·6	41·9	41·4	39·1	30·9	27·3	31·2	30·6	29·7	36·9
16	42·9	43·3	42·9	41·6	41·6	41·7	40·0	30·8	28·2	31·1	30·0	29·8	37·0
17	43·1	43·3	42·6	41·8	41·4	41·2	39·7	30·5	29·9	31·2	29·9	30·0	37·0
18	43·1	42·9	42·5	41·3	40·9	40·9	40·1	30·2	29·7	31·2	29·6	30·5	36·9
19	43·0	43·4	42·0	41·4	41·2	40·6	39·5	30·3	30·1	31·8	30·2	31·0	37·0
20	43·4	43·1	41·3	41·9	40·6	40·7	39·9	30·4	29·8	31·7	29·8	31·0	37·0
21	43·6	43·5	41·2	41·7	40·4	40·5	39·9	29·1	29·5	31·8	29·1	30·7	36·7
22	44·1	43·7	41·6	42·0	40·2	40·4	40·8	29·8	29·2	31·1	29·9	30·4	36·9
23	44·7	43·8	41·9	42·3	40·2	40·7	41·2	30·1	29·4	31·7	28·9	30·3	37·1

Table XVIII.—Mean Lunation-Determination of the Western Declination of the Magnet, &c.—*continued.*

1850.

Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.

Lunar Hour.	January. d h m 13. 0. 49	February. d h m 12. 1. 6	March. d h m 14. 1. 19	April. d h m 12. 0. 46	May. d h m 12. 1. 11	June. d h m 10. 2. 52	July. d h m 10. 1. 40	August d h m 8. 1. 22	September. d h m 6. 0. 57	October. d h m 6 1. 20	November. d h m 4. 0. 49	December. d h m 4 1. 12	Mean.
	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°
	′	′	′	′	′	′	′	′	′	′	′	′	′
0	28·4	27·5	26·2	26·3	24·1	24·1	22·0	21·1	25·5	18·5	19·8	18·9	23·5
1	29·1	27·1	26·7	26·1	24·5	24·4	21·9	21·1	25·1	18·4	19·5	18·6	22·5
2	28·7	27·5	26·8	26·2	24·7	24·7	21·9	21·4	25·4	18·0	19·0	18·6	23·5
3	28·4	27·7	26·1	25·9	24·8	24·8	22·0	21·4	24·7	17·5	19·0	18·7	23·4
4	28·5	27·8	26·2	26·1	25·3	24·7	21·9	20·8	24·3	17·4	18·6	18·8	23·4
5	27·9	27·7	26·1	26·1	25·0	24·4	21·3	21·4	23·6	17·1	18·7	18·2	23·1
6	28·7	27·7	26·0	25·8	24·8	24·3	21·5	21·0	23·5	17·0	19·1	18·4	23·2
7	28·7	27·2	25·5	25·7	24·4	24·4	21·4	22·2	24·2	16·6	18·8	18·6	23·1
8	28·7	27·5	26·0	25·5	24·2	24·3	21·2	22·1	24·1	16·1	18·4	18·7	23·1
9	28·6	27·1	26·5	25·1	23·9	24·8	21·9	22·6	24·9	16·9	18·3	19·3	23·3
10	28·8	27·3	26·4	25·6	24·0	25·3	22·0	22·5	25·0	17·7	18·1	19·1	23·5
11	28·8	26·7	27·0	25·6	24·4	25·3	22·4	22·2	25·8	17·6	18·7	19·2	23·6
12	28·9	26·1	26·9	25·4	24·5	25·2	22·6	22·2	25·9	17·9	19·1	19·3	23·7
13	28·5	26·1	26·8	25·6	24·7	25·2	23·3	22·2	26·4	17·8	19·4	19·2	23·8
14	28·7	26·1	26·4	25·8	24·3	25·1	22·7	22·5	26·2	17·4	19·4	19·2	23·6
15	28·6	26·0	25·8	25·3	23·8	24·9	22·2	22·4	26·1	17·7	19·4	19·2	23·5
16	28·9	25·8	25·3	24·8	24·1	25·1	22·6	22·3	26·0	18·1	19·6	19·0	23·5
17	29·1	26·4	25·2	25·0	23·7	24·4	22·5	22·2	26·2	18·1	19·6	19·1	23·5
18	28·4	26·1	25·5	25·0	23·7	24·0	22·8	22·8	26·3	17·7	19·4	19·1	23·4
19	29·0	26·4	25·8	24·7	23·4	23·4	22·2	23·0	25·9	17·8	19·1	18·4	23·3
20	29·0	26·7	25·6	24·8	23·7	23·2	22·3	22·6	26·2	18·2	19·2	18·9	23·4
21	28·6	26·9	25·8	25·2	23·7	23·5	22·6	22·0	26·5	18·1	18·7	18·7	23·4
22	28·5	27·1	25·7	25·3	24·0	23·4	22·1	21·8	27·0	18·4	19·8	18·5	23·5
23	28·3	26·8	25·2	26·3	23·8	23·5	21·9	21·7	26·7	18·4	19·9	18·6	23·4

1851.

Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.

Lunar Hour.	January. d h m 2. 0. 46	February. d h m 1. 1. 7	March. d h m 3. 1. 17	April. d h m 1. 0. 40	May. d h m 1. 0. 49	May. d h m 31. 1. 14	June. d h m 29. 0. 57	July. d h m 28. 0. 41	August. d h m 27. 1. 19	September. d h m 25. 0. 53	October. d h m 25. 1. 18	November. d h m 23. 0. 52	December. d h m 23. 1. 26	Mean.
	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°
	′	′	′	′	′	′	′	′	′	′	′	′	′	′
0	20·2	20·6	19·7	20·9	18·6	14·3	16·4	17·8	14·8	17·3	20·6	21·3	22·3	18·9
1	20·8	20·2	18·9	20·6	19·1	14·4	16·5	17·4	14·9	18·0	20·9	20·8	22·2	18·8
2	20·5	19·8	18·7	20·5	19·2	14·3	16·3	17·1	14·5	17·2	20·5	20·9	21·4	18·5
3	20·2	20·1	18·7	20·4	19·3	13·8	16·4	17·1	14·0	16·8	20·4	21·1	21·8	18·5
4	20·1	19·6	18·9	20·6	19·8	13·7	16·5	17·1	13·9	15·7	20·5	21·3	21·8	18·4
5	20·4	19·8	18·4	20·5	19·5	13·9	16·5	16·9	14·8	15·8	19·9	20·6	21·7	18·4
6	20·7	19·6	18·5	20·2	19·9	14·3	16·5	17·0	15·2	16·4	20·2	20·5	21·1	18·5
7	20·3	19·4	19·9	20·7	19·3	14·2	16·1	17·7	15·8	16·4	20·1	20·5	21·2	18·6
8	20·6	19·5	20·1	20·6	19·4	13·9	17·0	18·1	16·9	16·1	19·7	20·3	21·8	18·3
9	20·3	19·1	20·3	21·1	19·4	14·2	16·8	17·6	16·5	17·1	20·1	20·3	21·8	18·8
10	20·3	19·3	20·4	20·6	19·4	14·8	17·1	17·8	16·2	17·3	20·6	20·1	21·8	18·9
11	20·1	19·7	20·7	20·6	19·3	14·5	17·4	17·4	15·5	17·9	20·9	20·1	21·7	18·9
12	20·4	19·8	21·0	21·3	19·4	15·1	17·9	17·6	15·5	17·8	20·4	19·8	21·5	19·0
13	20·8	19·3	21·1	20·5	19·5	14·7	17·5	17·7	15·1	16·9	21·5	19·9	21·7	18·9
14	20·5	19·6	20·7	20·2	19·3	14·3	17·2	17·5	14·2	17·1	21·5	20·1	22·3	18·8
15	20·5	20·1	20·5	20·2	19·7	14·0	16·7	17·3	13·7	17·1	21·0	19·7	22·2	18·7
16	20·3	20·4	20·9	20·1	19·7	14·1	16·8	16·9	14·0	16·8	21·4	20·5	22·7	18·8
17	20·0	20·7	20·2	20·8	19·4	14·0	16·4	17·0	14·1	16·8	20·6	20·8	23·1	18·8
18	20·0	20·6	20·1	21·4	18·3	13·5	15·9	17·0	14·0	16·6	20·6	20·4	22·7	18·6
19	19·9	20·2	20·1	21·4	18·0	13·6	15·7	17·1	14·4	16·8	20·4	20·2	22·9	18·5
20	20·0	20·3	20·7	20·9	18·2	14·2	15·9	17·2	14·6	17·2	20·8	20·1	22·5	18·7
21	20·3	20·5	20·4	20·6	17·8	14·3	16·1	17·5	14·8	17·5	20·8	20·0	22·1	18·7
22	20·2	20·9	20·0	20·4	18·0	14·6	16·2	17·6	15·2	17·3	20·6	20·2	22·1	18·8
23	20·1	20·7	19·8	20·6	18·8	14·6	17·0	18·0	14·7	17·2	20·6	21·1	21·7	18·9

TABLE XVIII.—MEAN LUNATION-DETERMINATION of the WESTERN DECLINATION of the MAGNET, &c.—*continued.*

1852.

Lunar Hour.	Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.												
	January. d h m 21. 1. 3	February. d h m 20. 1. 21	March. d h m 20. 0. 44	April. d h m 19. 0. 46	May. d h m 19. 0. 56	June. d h m 18. 1. 24	July. d h m 17. 1. 6	August. d h m 15. 0. 45	September. d h m 14. 1. 13	October. d h m 13. 0. 44	November. d h m 12. 1. 15	December. d h m 11. 0. 56	Mean.
	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°
	′	′	′	′	′	′	′	′	′	′	′	′	′
0	22·7	22·0	21·8	23·2	18·6	18·9	19·8	16·3	14·2	11·5	12·0	11·6	17·7
1	22·3	21·6	21·2	22·6	19·1	19·1	19·0	16·8	14·4	11·7	11·7	10·8	17·5
2	22·5	21·9	21·5	21·7	19·1	18·8	18·8	16·8	14·3	12·1	13·0	9·7	17·5
3	22·3	21·2	21·8	21·8	18·9	18·4	18·7	17·2	13·9	12·3	12·1	9·5	17·4
4	21·3	22·6	21·8	21·5	19·5	18·5	18·5	16·4	14·0	12·2	12·4	10·2	17·4
5	21·5	21·9	20·7	22·1	19·2	18·4	18·5	16·3	13·1	13·0	12·2	11·1	17·3
6	21·6	21·5	21·3	22·3	19·0	18·5	18·4	16·3	14·2	12·4	12·3	10·1	17·3
7	21·7	21·9	20·9	21·9	18·9	18·4	19·1	16·5	13·9	12·6	11·7	10·3	17·3
8	21·8	21·7	20·8	22·9	19·1	18·6	19·7	16·7	13·7	12·6	12·5	10·6	17·5
9	22·0	22·6	21·1	22·4	18·5	17·7	20·1	17·1	13·7	12·3	12·1	10·3	17·5
10	22·5	22·2	21·9	22·1	18·9	18·3	19·3	16·8	15·3	12·3	12·2	10·2	17·7
11	22·6	22·7	21·4	22·8	19·1	18·3	19·3	16·3	14·0	12·5	11·9	11·7	17·7
12	22·6	23·2	22·7	22·6	19·0	17·9	19·1	17·0	13·8	13·0	12·4	12·0	17·9
13	22·9	23·4	22·9	23·3	19·6	17·8	18·4	16·1	14·3	13·5	12·6	12·5	17·9
14	23·4	23·0	23·5	24·3	21·0	17·5	18·2	15·3	14·6	13·0	12·4	13·3	18·3
15	22·8	23·1	23·4	23·8	20·8	17·5	18·1	16·1	14·8	14·0	12·7	12·8	18·3
16	23·0	22·0	23·1	22·8	21·1	17·7	18·7	15·0	14·2	13·8	12·6	13·5	18·1
17	23·0	21·6	22·0	23·0	20·5	17·3	18·2	14·9	14·1	13·3	12·5	13·0	17·8
18	23·6	21·8	21·7	23·6	19·3	17·4	19·2	15·3	13·7	13·5	12·3	12·5	17·8
19	23·0	21·3	21·8	23·3	19·6	16·7	18·9	15·8	13·8	13·3	12·9	13·2	17·8
20	23·0	21·8	21·4	22·7	19·1	16·9	19·0	16·6	13·7	12·8	12·0	12·2	17·6
21	22·1	20·9	22·0	22·9	19·1	17·9	19·0	17·1	13·9	12·4	12·0	11·6	17·6
22	22·3	21·1	22·1	22·6	18·2	18·7	19·0	17·0	13·5	11·9	12·0	11·6	17·5
23	22·0	21·9	21·9	22·8	18·3	19·8	19·5	16·5	14·3	12·2	11·6	11·4	17·7

1853.

Lunar Hour.	Gottingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.													
	January. d h m 10. 1. 39	February. d h m 8. 1. 14	March. d h m 9. 0. 44	April. d h m 8. 0. 59	May. d h m 8. 0. 54	June. d h m 7. 1. 11	July. d h m 6. 0. 48	August. d h m 5. 1. 16	September. d h m 3. 0. 48	October. d h m 3. 1. 5	November. d h m 2. 1. 31	December. d h m 1. 1. 13	December. d h m 30. 1. 0	Mean.
	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°	22°
	′	′	′	′	′	′	′	′	′	′	′	′	′	′
0	13·3	12·4	12·7	12·3	10·9	10·5	11·0	10·4	12·2	6·5	4·4	6·4	3·8	9·7
1	12·8	12·3	11·3	12·6	11·2	9·9	10·8	10·1	11·8	6·3	4·7	6·7	3·9	9·6
2	12·7	12·0	11·3	12·6	11·4	9·7	10·7	10·0	11·8	7·0	5·4	6·4	3·8	9·6
3	12·1	11·4	11·0	12·1	11·5	9·1	10·0	9·7	11·1	7·5	5·2	6·2	4·5	9·3
4	11·8	12·2	11·5	11·4	11·3	9·7	9·5	10·2	11·1	7·3	5·2	6·3	4·4	9·4
5	11·5	12·2	9·9	10·8	11·0	9·4	9·8	10·1	10·5	7·3	5·5	5·8	5·1	9·1
6	11·1	11·9	10·7	10·9	10·7	9·7	9·6	10·4	10·7	7·1	5·2	5·7	5·3	9·2
7	10·7	10·6	10·5	10·2	10·6	9·8	10·2	10·4	10·7	7·7	5·3	4·9	5·4	9·0
8	11·8	10·2	10·9	10·6	11·1	9·6	10·8	10·2	11·2	7·7	5·5	5·6	5·6	9·3
9	11·5	10·5	10·6	11·6	10·8	9·5	10·7	10·0	11·7	7·4	5·3	6·0	5·6	9·3
10	11·9	10·7	11·3	11·1	11·0	9·8	10·7	9·3	11·4	7·1	5·7	6·0	5·1	9·3
11	12·5	11·3	11·2	11·6	11·3	9·9	11·3	9·4	11·2	7·6	5·4	5·4	5·4	9·5
12	12·3	12·1	11·6	12·1	11·8	10·1	10·8	8·7	11·6	7·8	5·5	5·8	5·5	9·7
13	12·7	11·6	11·5	11·5	11·5	9·8	11·1	10·0	11·1	7·6	5·1	6·5	4·9	9·7
14	13·2	11·3	11·3	11·5	11·0	10·8	10·6	9·9	10·5	7·1	5·6	7·1	4·8	9·6
15	12·9	12·2	11·8	11·6	11·3	10·8	10·6	10·3	10·6	7·3	5·1	7·5	5·2	9·9
16	12·6	12·3	10·5	11·2	10·7	10·1	9·9	9·9	10·3	6·7	5·4	6·5	4·6	9·3
17	12·2	12·7	11·2	11·8	10·1	10·0	9·9	10·4	10·6	7·1	4·9	6·9	3·8	9·3
18	12·2	12·4	12·0	10·7	9·6	9·7	9·7	10·5	10·8	7·0	4·6	6·4	2·7	9·1
19	12·7	12·0	11·9	11·2	10·1	10·0	10·1	10·3	11·4	7·0	4·8	4·9	3·0	9·2
20	12·7	12·4	12·3	11·6	10·0	9·7	10·8	10·8	11·4	6·4	4·9	5·6	2·3	9·3
21	12·6	12·4	12·6	12·1	10·3	9·9	10·8	10·9	12·5	6·2	4·4	6·2	1·9	9·4
22	13·1	12·5	12·2	12·7	10·7	9·9	10·9	10·3	12·6	5·7	4·5	6·4	2·6	9·6
23	13·4	12·2	11·8	12·7	10·9	10·4	11·0	10·1	12·2	5·9	4·1	6·6	3·6	9·6

TABLE XVIII.—MEAN LUNATION-DETERMINATION of the WESTERN DECLINATION of the MAGNET, &c.—*continued.*

1854.

Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.

Lunar Hour.	January. d h m 28. 0. 46	February. d h m 27. 1. 17	March. d h m 28. 0. 43	April. d h m 27. 0. 51	May. d h m 27. 1. 7	June. d h m 25. 0. 43	July. d h m 25. 1. 9	August. d h m 24. 1. 23	September. d h m 22. 0. 47	October. d h m 22. 0. 57	November. d h m 21. 1. 23	December. d h m 20. 1. 16	Mean.
	22°	22°	22°	22°	22°	21°	21°	21°	21°	21°	21°	21°	21°
	′	′	′	′	′	′	′	′	′	′	′	′	′
0	2·1	3·6	3·2	2·3	1·3	61·3	62·4	59·7	59·2	58·5	58·1	50·7	60·7
1	2·4	2·7	3·0	1·5	1·5	60·9	62·4	59·7	59·3	58·7	58·4	51·3	60·2
2	2·2	3·3	3·5	2·0	1·3	60·3	62·0	59·6	59·2	58·8	58·0	52·1	60·2
3	2·1	3·6	3·3	1·5	1·0	59·9	61·7	59·6	59·7	58·5	57·7	52·4	60·2
4	2·0	3·0	3·2	2·1	1·4	60·1	61·6	59·7	59·3	58·3	58·1	52·6	60·1
5	2·8	2·4	3·1	2·4	1·4	60·6	60·9	59·8	59·4	58·4	58·2	52·7	60·2
6	2·9	2·6	2·1	1·9	1·5	60·6	61·3	59·6	59·8	58·0	58·1	52·8	60·1
7	2·2	1·7	1·9	1·2	1·3	60·3	60·9	59·5	59·0	58·1	58·2	52·2	59·7
8	2·4	1·9	2·2	0·8	1·6	60·2	61·2	58·9	58·1	58·0	57·9	52·2	59·6
9	3·2	2·0	1·6	0·7	1·2	60·2	61·4	59·0	59·1	58·1	57·8	52·1	59·7
10	3·6	1·9	2·1	1·1	1·3	60·2	61·7	60·0	59·7	58·7	57·9	51·6	59·9
11	3·5	2·4	2·0	1·6	1·4	60·4	61·5	60·2	59·0	58·7	58·0	52·3	60·1
12	4·6	2·3	2·2	2·2	1·6	60·3	60·7	59·9	58·2	58·6	58·2	52·1	60·1
13	4·0	2·5	1·7	2·7	1·7	60·4	59·9	59·8	58·7	58·7	58·1	51·7	60·0
14	3·5	2·5	1·3	2·8	2·0	60·2	60·1	60·0	58·1	58·9	58·7	51·6	60·0
15	4·0	2·9	1·4	2·3	1·4	60·5	60·7	59·5	57·5	58·8	58·1	51·6	59·9
16	3·6	3·2	2·6	1·4	1·4	60·7	61·0	59·3	57·0	58·9	58·3	51·2	59·9
17	3·9	2·0	1·9	1·7	1·6	60·9	61·2	59·3	57·6	58·9	58·2	50·3	59·8
18	2·5	2·1	2·2	2·0	1·3	61·0	61·7	58·8	57·4	58·4	58·0	50·6	59·7
19	2·8	2·6	2·4	1·2	0·7	61·4	61·3	59·1	58·3	57·8	57·9	50·9	59·7
20	1·8	2·0	2·1	1·2	0·9	61·6	61·7	59·3	58·5	57·8	57·3	50·9	59·6
21	1·5	3·2	1·7	1·2	0·8	61·0	62·3	59·4	58·4	58·0	57·5	51·3	59·7
22	1·8	3·1	2·5	1·3	0·8	61·5	62·9	59·2	58·7	58·1	57·4	50·8	59·8
23	1·5	3·7	3·2	1·3	0·8	61·3	62·6	59·5	58·7	58·3	57·5	51·0	59·9

1855.

Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.

Lunar Hour.	January. d h m 18. 1. 5	February. d h m 16. 0. 46	March. d h m 18. 1. 10	April. d h m 17. 1. 25	May. d h m 16. 0. 56	June. d h m 15. 1. 27	July. d h m 14. 1. 6	August. d h m 13. 1. 23	September. d h m 11. 0. 45	October. d h m 11. 0. 44	November. d h m 10. 0. 56	December. d h m 10. 1. 35	Mean.
	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°
	′	′	′	′	′	′	′	′	′	′	′	′	′
0	49·0	49·5	50·1	49·1	49·7	52·1	49·7	50·2	47·2	46·4	45·9	45·0	48·7
1	48·6	49·8	49·8	49·1	49·6	51·2	48·9	49·8	47·2	46·1	45·9	46·3	48·5
2	49·1	49·7	49·3	49·4	50·2	51·0	48·8	49·4	48·0	45·5	46·1	46·8	48·6
3	49·5	49·9	48·9	49·3	50·2	51·7	49·0	49·5	47·2	45·6	45·2	46·5	48·5
4	49·4	49·0	48·6	49·1	49·6	51·4	49·1	48·8	47·3	45·1	45·2	46·4	48·3
5	49·2	48·8	48·8	49·1	49·8	51·0	48·0	48·7	47·1	45·3	45·4	45·8	48·1
6	50·4	47·8	48·8	49·1	49·9	50·7	48·9	49·3	47·0	45·4	46·2	46·0	48·4
7	49·8	48·2	49·1	48·9	50·6	50·1	49·4	48·9	47·4	45·9	45·6	46·3	48·4
8	49·7	48·2	48·3	48·5	50·2	50·3	49·7	47·9	47·0	46·3	46·3	46·4	48·2
9	49·8	49·5	48·7	49·3	50·2	49·9	49·7	47·9	47·9	46·1	46·0	46·4	48·5
10	49·6	49·4	48·4	49·5	50·8	49·1	49·5	47·6	48·2	46·2	46·0	47·0	48·4
11	49·5	49·2	48·3	49·8	51·0	48·9	50·2	48·2	47·6	45·9	46·1	47·0	48·5
12	49·3	49·4	48·2	50·2	50·7	49·6	50·2	49·0	47·4	45·9	45·9	46·7	48·5
13	49·6	49·3	49·0	50·1	50·3	49·8	50·1	48·8	47·3	45·9	45·7	46·9	48·6
14	49·6	48·5	49·6	49·7	50·4	49·9	50·2	48·2	47·7	46·3	46·1	47·3	48·6
15	49·4	48·9	49·2	49·6	50·0	49·6	50·2	48·0	47·1	46·9	45·9	47·4	48·4
16	48·8	48·4	48·8	49·0	50·2	49·9	49·3	48·3	46·3	46·6	45·8	47·4	48·2
17	48·8	48·3	49·1	48·6	50·9	50·2	48·9	48·3	46·3	46·3	46·0	47·5	48·3
18	48·7	48·6	48·7	49·1	51·0	50·4	48·7	48·4	46·3	45·7	46·0	47·3	48·2
19	48·8	47·7	49·1	48·5	50·0	51·1	48·8	48·6	46·7	45·7	45·7	47·1	48·2
20	48·6	47·1	48·7	48·9	50·5	51·5	49·2	49·4	46·8	45·8	45·9	47·0	48·3
21	48·4	47·8	48·8	48·8	50·5	51·5	48·1	49·4	47·2	46·4	45·7	46·6	48·3
22	48·3	48·0	49·1	48·9	49·9	51·8	47·8	50·2	47·4	46·3	45·6	46·3	48·3
23	48·4	49·0	48·9	49·9	50·0	52·6	48·4	50·6	47·4	46·7	45·9	46·2	48·5

TABLE XVIII.—MEAN LUNATION-DETERMINATION of the WESTERN DECLINATION of the MAGNET, &c.—*concluded.*

1856.

Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.

Lunar Hour.	January. d h m 8. 1. 53	February. d h m 6. 1. 5	March. d h m 7. 1. 31	April. d h m 5. 0. 57	May. d h m 5. 1. 26	June. d h m 3. 1. 6	July. d h m 2. 0. 52	August. d h m 1. 1. 22	August. d h m 30. 0. 47	September. d h m 29. 0. 46	October. d h m 29. 0. 46	November. d h m 28. 1. 8	December. d h m 27. 0. 50	Mean.
	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°
	′	′	′	′	′	′	′	′	′	′	′	′	′	′
0	45·3	45·7	45·1	43·4	43·8	43·7	45·0	45·2	45·1	41·6	41·1	40·7	37·4	43·3
1	44·9	46·1	45·5	43·3	44·8	44·1	45·1	44·6	44·9	41·7	41·3	40·5	37·4	43·4
2	45·5	46·2	45·9	43·8	44·1	43·8	44·8	43·7	43·8	41·7	41·4	40·1	37·4	43·3
3	45·2	46·3	45·9	44·0	44·2	43·6	45·2	42·7	41·5	41·3	41·4	40·2	37·6	43·0
4	45·8	46·0	45·8	44·1	44·2	43·9	44·8	42·7	40·7	41·5	41·2	40·6	37·6	43·1
5	45·8	46·3	45·7	43·6	44·6	44·0	44·5	43·1	40·6	41·2	41·4	40·1	37·5	42·9
6	46·1	46·0	45·6	43·6	44·7	43·9	44·6	42·9	41·1	41·3	41·4	40·1	37·6	43·0
7	46·1	45·6	45·4	43·4	44·5	44·1	44·5	43·7	42·5	41·4	41·4	39·9	37·5	43 1
8	46·1	45·9	45·6	43·5	44·3	44·3	44·2	43·5	43·5	41·0	41·5	40·0	37·0	43·1
9	46·1	45·7	45·7	43·7	44·4	44·7	44·3	44·0	42·0	41·7	41·2	40·5	37·0	43·2
10	46·1	45·1	45·9	44·0	44·0	44·1	44·2	44·4	41·8	42·1	41·0	40·0	37·3	43·2
11	46·6	46·3	46·1	44·4	43·5	44·6	44·4	43·8	41·3	41·6	40·9	39·5	37·3	43·1
12	46·1	46·6	46·1	44·7	42·9	44·2	44·0	43·9	42·2	40·8	40·9	39·9	37·2	43·0
13	46·4	45·9	46·1	44·8	42·8	43·9	44·9	43·4	41·8	40·3	41·2	40·6	37·1	43·0
14	46·4	46·3	45·7	45·0	42·6	43·4	45·0	43·7	42·0	40·1	41·2	40·1	36·7	42·9
15	46·2	46·2	45·9	44·4	42·4	43·0	44·8	44·0	41·3	40·2	40·7	39·9	36·7	42·7
16	45·7	45·9	45·9	44·3	42·8	43·5	44·7	44·0	42·6	40·7	40·7	40·2	36·1	42·8
17	45·8	45·9	45·8	43·9	43·1	43·4	44·5	43·6	43·5	40·1	40·8	40·3	36·2	42·8
18	45·6	45·9	45·7	43·7	43·0	43·1	45·0	43·2	44·2	40·1	41·1	40·6	36·2	42·9
19	45·7	45·1	46·0	43·5	43·0	44·4	44·4	44·1	45·4	39·7	41·0	41·3	36·3	43·1
20	45·3	45·1	45·3	43·8	43·0	43·9	44·9	44·4	45·5	39·6	40·7	41·1	35·7	42·9
21	45·1	44·9	45·2	43·8	42·5	43·9	45·0	44·8	45·3	40·4	40·9	41·0	35·8	43·0
22	45·3	45·3	45·3	42·9	42·5	43·3	45·3	44·9	46·4	41·0	41·3	40·9	36·5	43·1
23	45·2	45·3	44·9	43·5	43·4	43·1	45·0	44·6	45·8	41·8	41·0	40·5	36·6	43·1

1857.

Göttingen Mean Solar Time of the beginning of each Solar Day of each Lunation.

Lunar Hour.	January. d h m 26. 1. 27	February. d h m 24. 0. 58	March. d h m 26. 1. 15	April. d h m 24. 0. 46	May. d h m 24. 1. 30	June. d h m 22. 1. 20	July. d h m 21. 1. 4	August. d h m 22. 1. 25	September. d h m 18. 0. 45	October. d h m 18.0. 46	November. d h m 17. 1. 0	December. d h m 17. 1. 29	Mean.
	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°	21°
	′	′	′	′	′	′	′	′	′	′	′	′	′
0	36·3	36·8	35·8	37·2	34·4	36·1	34·7	35·8	36·9	35·0	32·9	33·0	35·4
1	36·7	37·0	35·6	36·9	34·2	35·8	34·6	35·5	36·4	35·0	32·7	31·4	35·2
2	36·5	37·1	35·5	36·8	33·8	35·5	34·5	34·9	36·0	35·1	32·4	30·4	34·9
3	36·6	36·8	35·5	36·0	33·6	34·7	34·4	35·0	36·2	35·2	32·5	29·8	34·7
4	36·6	36·2	35·7	35·3	33·7	34·5	34·5	35·1	35·9	35·0	32·2	29·9	34·5
5	36·3	36·0	35·8	35·2	33·6	34·3	34·1	35·2	36·4	35·0	32·3	30·0	34·5
6	36·2	36·1	36·1	35·8	33·5	34·6	34·5	35·2	36·5	35·0	32·5	29·7	34·6
7	36·0	36·3	36·1	36·6	34·2	34·4	35·0	34·8	36·9	34·6	33·0	29·9	34·8
8	36·5	36·5	35·7	36·6	35·1	34·5	34·7	35·3	36·9	35·1	32·7	30·5	35·0
9	36·4	36·5	35·9	36·7	34·9	34·5	34·5	35·5	37·0	35·4	32·5	30·6	35·0
10	36·5	36·2	36·3	35·8	34·3	34·6	34·9	35·4	37·1	35·3	32·6	31·1	35·0
11	36·8	36·5	36·3	35·8	34·7	34·7	35·1	35·8	37·1	35·1	32·9	31·9	35·2
12	37·0	36·9	36·6	36·1	35·1	35·4	34·7	35·6	36·9	35·7	32·9	32·5	35·5
13	37·0	36·7	36·8	36·4	35·3	36·0	34·9	35·4	37·1	35·8	33·3	32·6	35·6
14	37·1	36·6	36·6	36·8	35·0	35·9	35·5	35·4	37·5	35·7	33·7	32·9	35·7
15	36·7	36·1	36·5	37·0	35·1	36·1	35·5	35·5	37·1	35·8	33·9	32·8	35·7
16	36·4	36·0	36·2	37·0	35·4	36·5	35·6	35·8	37·0	36·1	33·6	34·1	35·8
17	36·2	35·9	36·0	36·7	35·8	35·5	35·3	35·5	37·1	35·2	33·4	34·6	35·6
18	36·0	36·1	35·5	36·1	35·4	35·2	35·4	35·7	36·9	35·4	33·1	34·8	35·5
19	36·0	36·1	35·7	35·8	34·8	35·5	34·9	35·8	37·1	35·5	32·9	34·6	35·4
20	36·3	36·2	35·5	35·7	34·7	35·4	35·2	36·3	37·4	35·4	32·8	34·5	35·5
21	36·4	36·2	35·7	36·0	34·8	35·5	35·1	36·1	37·9	35·2	32·4	34·0	35·4
22	36·2	36·4	35·8	36·0	34·9	35·5	35·0	36·2	38·0	35·1	32·4	33·5	35·4
23	36·2	36·5	35·8	36·5	34·7	35·3	35·1	35·8	38·2	34·7	32·4	33·0	35·4

TABLE XIX.—MEAN, through the RANGE of LUNATIONS, of the LUNATION-MEAN DETERMINATIONS of the LUNO-DIURNAL INEQUALITY of DECLINATION, exhibited separately for the different Years, with the MEAN for all the YEARS.

Lunar Hour.	Mean Luno-Diurnal Inequality in each Year.										Mean, 1848 to 1857	Equivalent in terms of Horizontal Force.
	1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.		
	′	′	′	′	′	′	′	′	′	′	′	
0	+ 0·1	+ 0·5	+ 0·1	+ 0·2	0·0	+ 0·3	+ 0·8	+ 0·3	+ 0·2	+ 0·2	+ 0·27	+0·000079
1	− 0·2	+ 0·4	+ 0·1	+ 0·1	− 0·2	+ 0·2	+ 0·3	+ 0·1	+ 0·3	− 0·0	+ 0·11	+ 32
2	+ 0·2	+ 0·5	+ 0·1	− 0·2	− 0·2	+ 0·2	+ 0·3	+ 0·2	+ 0·2	− 0·3	+ 0·10	+ 29
3	+ 0·4	+ 0·3	0·0	− 0·2	− 0·3	− 0·1	+ 0·3	+ 0·1	+ 0·1	− 0·5	− 0·01	− 3
4	+ 0·2	− 0·1	0·0	− 0·3	− 0·3	0·0	+ 0·2	− 0·1	0·0	− 0·7	− 0·11	− 32
5	+ 0·1	− 0·6	− 0·3	− 0·3	− 0·4	− 0·3	+ 0·3	− 0·3	− 0·2	− 0·7	− 0·27	− 79
6	+ 0·3	− 0·6	− 0·2	− 0·2	− 0·4	− 0·2	+ 0·2	0·0	− 0·1	− 0·6	− 0·18	− 52
7	+ 0·3	− 0·8	− 0·3	− 0·1	− 0·4	− 0·4	− 0·2	0·0	0·0	− 0·4	− 0·23	− 67
8	+ 0·4	− 0·7	− 0·3	+ 0·1	− 0·2	− 0·1	− 0·3	− 0·2	0·0	− 0·2	− 0·15	− 44
9	+ 0·4	− 0·6	− 0·1	+ 0·1	− 0·2	− 0·1	− 0·2	+ 0·1	+ 0·1	− 0·2	− 0·07	− 20
10	+ 0·4	− 0·4	+ 0·1	+ 0·2	0·0	− 0·1	0·0	0·0	+ 0·1	− 0·2	+ 0·01	+ 3
11	+ 0·3	− 0·1	+ 0·2	+ 0·2	0·0	+ 0·1	+ 0·2	+ 0·1	0·0	0·0	+ 0·10	+ 29
12	+ 0·3	0·0	+ 0·3	+ 0·3	+ 0·2	+ 0·3	+ 0·2	+ 0·1	− 0·1	+ 0·3	+ 0·19	+ 55
13	+ 0·1	+ 0·2	+ 0·4	+ 0·2	+ 0·2	+ 0·3	+ 0·1	+ 0·2	− 0·1	+ 0·4	+ 0·20	+ 58
14	− 0·2	+ 0·2	+ 0·2	+ 0·1	+ 0·6	+ 0·2	+ 0·1	+ 0·2	− 0·2	+ 0·5	+ 0·17	+ 49
15	− 0·1	0·0	+ 0·1	0·0	+ 0·6	+ 0·5	0·0	0·0	− 0·4	+ 0·5	+ 0·12	+ 35
16	− 0·2	+ 0·1	+ 0·1	+ 0·1	+ 0·4	− 0·1	0·0	− 0·2	− 0·3	+ 0·6	+ 0·05	+ 15
17	− 0·3	+ 0·1	+ 0·1	+ 0·1	+ 0·1	− 0·1	− 0·1	− 0·1	− 0·3	+ 0·4	− 0·01	− 3
18	− 0·3	0·0	0·0	− 0·1	+ 0·1	− 0·3	− 0·2	− 0·2	− 0·2	+ 0·3	− 0·09	− 26
19	− 0·5	+ 0·1	− 0·1	− 0·2	+ 0·1	− 0·2	− 0·2	− 0·2	0·0	+ 0·2	− 0·10	− 29
20	− 0·7	+ 0·1	0·0	0·0	− 0·1	− 0·1	− 0·3	− 0·1	− 0·2	+ 0·3	− 0·11	− 32
21	− 0·7	− 0·2	0·0	0·0	− 0·1	0·0	− 0·2	− 0·1	− 0·1	+ 0·2	− 0·12	− 35
22	− 0·6	0·0	+ 0·1	+ 0·1	− 0·2	+ 0·2	− 0·1	− 0·1	0·0	+ 0·2	− 0·04	− 12
23	− 0·3	+ 0·2	0·0	+ 0·2	0·0	+ 0·2	0·0	+ 0·1	0·0	+ 0·2	+ 0·06	+ 17

REDUCTIONS OF MAGNETIC HORIZONTAL FORCE REFERRED TO THE MOON'S PLACE.

TABLE XX.—MEAN LUNATION-INEQUALITY of the MAGNETIC HORIZONTAL FORCE, exhibited separately for the different Years, with the MEAN for all the YEARS, corrected for the DAILY PROPORTION of SECULAR CHANGE of HORIZONTAL FORCE.

Day of the Lunation.	Mean Lunation-Inequality in each Year.										Mean, 1848 to 1857.	Mean corrected for Secular Change.	Fourth Mean of Successive Numbers.
	1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.			
1	−0·0025	+0·0005	0·0000	−0·0004	+0·0002	0·0000	−0·0008	+0·0002	+0·0005	−0·0012	−0·00035	−0·00027	−0·00011
2	− 1	+ 2	+ 2	+ 2	+ 5	− 1	0	− 3	0	+ 1	+ 7	+ 15	+ 1
3	+ 9	− 4	+ 2	+ 1	− 2	− 7	0	− 5	− 2	+ 11	+ 3	+ 10	+ 7
4	− 11	− 1	− 1	+ 6	+ 2	0	+ 1	+ 1	+ 3	− 4	− 4	+ 2	+ 6
5	− 9	− 3	+ 6	+ 1	− 2	+ 2	+ 1	+ 4	+ 1	+ 3	+ 4	+ 10	+ 4
6	− 6	+ 4	+ 4	− 1	− 1	− 4	+ 3	+ 3	− 12	− 2	− 12	− 7	+ 3
7	− 2	− 7	+ 6	+ 7	− 1	+ 2	+ 5	− 2	− 6	+ 3	+ 5	+ 10	+ 5
8	+ 4	− 6	+ 1	+ 4	− 2	+ 2	+ 3	− 10	+ 6	+ 3	+ 5	+ 9	+ 6
9	+ 1	+ 1	+ 2	0	− 2	+ 3	+ 2	+ 1	− 6	− 5	− 3	0	+ 7
10	+ 11	− 1	− 3	+ 4	− 4	+ 8	− 3	+ 2	− 5	+ 3	+ 12	+ 15	+ 8
11	− 5	+ 5	− 8	+ 3	− 2	+ 12	− 2	+ 2	− 3	+ 6	+ 8	+ 10	+ 7
12	+ 6	+ 1	− 7	+ 1	− 2	+ 3	− 2	− 2	− 8	+ 1	− 5	− 3	+ 2
13	− 7	− 4	+ 1	− 6	+ 2	+ 11	+ 3	− 2	− 11	+ 7	− 6	− 5	+ 1
14	+ 11	0	+ 3	+ 1	+ 1	+ 13	− 1	− 4	− 12	+ 7	+ 15	+ 19	− 3
15	− 21	− 5	+ 11	− 1	− 3	− 1	− 10	+ 3	− 5	+ 1	− 31	− 31	− 13
16	− 5	+ 2	+ 5	− 3	− 3	− 10	− 4	− 1	+ 3	+ 1	− 15	− 16	− 20
17	− 8	+ 6	+ 6	− 3	− 5	− 7	− 9	0	− 4	− 1	− 25	− 26	− 18
18	+ 1	− 3	+ 6	− 5	− 4	− 1	− 10	+ 1	− 3	+ 5	− 13	− 15	− 8
19	+ 18	+ 4	− 3	− 4	+ 2	− 2	− 6	0	+ 10	+ 1	+ 20	+ 17	+ 4
20	+ 8	+ 1	− 2	− 2	− 3	− 9	0	0	+ 8	+ 9	+ 10	+ 7	+ 13
21	− 10	+ 4	+ 1	+ 2	− 3	+ 6	+ 2	+ 10	+ 9	+ 5	+ 26	+ 22	+ 17
22	+ 16	+ 2	− 9	+ 7	0	− 3	+ 6	+ 6	+ 8	− 7	+ 26	+ 22	+ 16
23	+ 12	− 3	− 1	+ 2	+ 3	− 2	− 4	+ 7	+ 5	− 11	+ 8	+ 3	+ 12
24	+ 12	0	− 1	+ 2	+ 5	+ 14	− 5	+ 2	− 8	− 5	+ 16	+ 10	+ 9
25	+ 19	+ 4	− 4	+ 3	− 3	− 7	+ 5	− 3	+ 6	+ 1	+ 21	+ 15	+ 3
26	+ 2	− 1	− 5	− 2	+ 7	− 17	+ 12	− 3	+ 2	0	− 5	− 12	− 11
27	− 10	+ 1	− 14	− 5	+ 1	− 7	+ 10	− 3	− 6	− 1	− 34	− 41	− 22
28	+ 2	+ 2	− 2	− 6	− 1	− 2	+ 6	− 4	− 1	0	− 6	− 14	− 22
29	− 24	− 9	+ 3	+ 5	0	0	+ 4	+ 6	+ 12	− 5	− 8	− 16	− 18

TABLE XXI.—MEAN LUNAR-MONTHLY DETERMINATION of the HORIZONTAL MAGNETIC FORCE, uncorrected for TEMPERATURE, at every LUNAR HOUR of the LUNAR DAY, obtained by taking the MEAN of all the DETERMINATIONS at the same LUNAR HOUR through each LUNATION.

1848.

Lunar Hour.	Gottingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.												
	January.	February.	March.	April.	May.	June.	July.	July.	August.	September.	October.	November.	December.
	d h m 6. 0. 43	d h m 5. 1. 14	d h m 5. 0. 47	d h m 4. 1. 16	d h m 3. 0. 53	d h m 2. 1. 34	d h m 1. 1. 15	d h m 30. 0. 53	d h m 29. 1. 12	d h m 28. 1. 21	d h m 27. 0. 45	d h m 26. 0. 59	d h m 26. 1. 20
0	0·1013	0·1013	0·1018	0·1029	0·1058	0·1078	0·0906	0·0930	0·0958	0·0966	0·1004	0·1006	0·1026
1	·1014	·1012	·1016	·1028	·1060	·1077	·0905	·0929	·0959	·0967	·1003	·1007	·1025
2	·1014	·1012	·1015	·1030	·1059	·1078	·0905	·0931	·0960	·0968	·1002	·1007	·1026
3	·1013	·1012	·1016	·1030	·1059	·1080	·0905	·0932	·0961	·0967	·1003	·1007	·1028
4	·1012	·1012	·1014	·1028	·1059	·1079	·0906	·0930	·0961	·0970	·1005	·1006	·1027
5	·1011	·1010	·1013	·1028	·1058	·1078	·0904	·0930	·0960	·0972	·1004	·1006	·1028
6	·1010	·1012	·1012	·1031	·1059	·1078	·0904	·0932	·0961	·0971	·1005	·1005	·1029
7	·1011	·1014	·1011	·1031	·1060	·1079	·0903	·0932	·0958	·0970	·1001	·1006	·1028
8	·1008	·1014	·1013	·1030	·1061	·1080	·0904	·0934	·0958	·0968	·1001	·1007	·1029
9	·1009	·1014	·1016	·1029	·1061	·1080	·0902	·0936	·0959	·0971	·1002	·1006	·1027
10	·1009	·1014	·1015	·1031	·1062	·1079	·0902	·0936	·0960	·0971	·1003	·1006	·1024
11	·1008	·1014	·1016	·1031	·1061	·1079	·0906	·0936	·0962	·0971	·1005	·1006	·1028
12	·1007	·1013	·1016	·1034	·1061	·1082	·0907	·0935	·0963	·0971	·1002	·1005	·1028
13	·1011	·1014	·1018	·1033	·1063	·1080	·0907	·0934	·0964	·0971	·1002	·1005	·1024
14	·1012	·1013	·1020	·1031	·1063	·1078	·0908	·0935	·0963	·0972	·1002	·1004	·1023
15	·1014	·1014	·1019	·1031	·1062	·1080	·0909	·0935	·0964	·0970	·1002	·1003	·1024
16	·1013	·1012	·1019	·1031	·1061	·1079	·0908	·0932	·0964	·0972	·1003	·1004	·1025
17	·1014	·1013	·1018	·1029	·1059	·1077	·0909	·0931	·0962	·0970	·1003	·1002	·1023
18	·1013	·1012	·1018	·1032	·1059	·1078	·0908	·0931	·0961	·0970	·1002	·1003	·1026
19	·1015	·1012	·1015	·1031	·1057	·1076	·0907	·0931	·0960	·0969	·1003	·1001	·1026
20	·1014	·1013	·1013	·1030	·1055	·1077	·0905	·0929	·0959	·0968	·1003	·1002	·1025
21	·1016	·1013	·1016	·1029	·1054	·1077	·0904	·0929	·0957	·0970	·1003	·1001	·1026
22	·1015	·1014	·1015	·1033	·1057	·1078	·0903	·0929	·0957	·0969	·1004	·1000	·1027
23	·1014	·1014	·1014	·1033	·1056	·1078	·0908	·0930	·0958	·0971	·1003	·1003	·1026

1849.

Lunar Hour.	Gottingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	d h m 24. 0. 54	d h m 23. 1. 15	d h m 24. 0. 45	d h m 23. 1. 12	d h m 22. 0. 52	d h m 21. 1. 38	d h m 20. 1. 20	d h m 18. 0. 57	d h m 17. 1. 18	d h m 16. 0. 44	d h m 15. 0. 58	d h m 15. 1. 17
0	0·1026	0·1025	0·1038	0·1013	0·0999	0·1001	0·0997	0·0993	0·1001	0·1001	0·1013	0·1014
1	·1027	·1026	·1038	·1013	·0999	·0999	·0996	·0994	·1003	·1001	·1013	·1016
2	·1029	·1028	·1039	·1015	·1001	·1000	·0997	·0996	·1004	·1002	·1015	·1016
3	·1028	·1027	·1041	·1016	·1001	·1000	·0997	·0996	·1005	·1001	·1015	·1020
4	·1029	·1028	·1041	·1018	·1000	·0999	·0996	·0994	·1003	·1001	·1016	·1018
5	·1028	·1028	·1037	·1018	·1003	·0998	·0994	·0993	·1003	·0999	·1014	·1020
6	·1028	·1027	·1034	·1017	·1002	·0998	·0994	·0991	·1001	·1001	·1014	·1022
7	·1026	·1025	·1036	·1019	·1004	·0997	·0994	·0991	·1001	·1002	·1012	·1023
8	·1027	·1025	·1035	·1017	·1005	·0999	·0993	·0990	·1002	·1003	·1011	·1023
9	·1023	·1026	·1035	·1017	·1005	·1000	·0993	·0991	·1000	·1003	·1013	·1023
10	·1022	·1027	·1033	·1018	·1003	·0998	·0993	·0991	·1002	·1002	·1013	·1025
11	·1022	·1029	·1035	·1017	·1003	·0998	·0995	·0992	·1002	·1001	·1014	·1026
12	·1024	·1028	·1036	·1018	·1002	·0999	·0994	·0993	·1002	·1001	·1014	·1026
13	·1024	·1028	·1034	·1016	·1004	·1000	·0994	·0994	·1002	·1001	·1014	·1027
14	·1025	·1028	·1032	·1014	·1004	·0998	·0994	·0993	·1002	·1001	·1013	·1027
15	·1024	·1026	·1035	·1014	·1003	·0998	·0994	·0993	·1003	·1000	·1013	·1025
16	·1024	·1026	·1036	·1014	·1005	·0999	·0991	·0995	·1003	·1000	·1013	·1021
17	·1024	·1025	·1036	·1013	·1002	·0998	·0992	·0995	·1002	·1000	·1014	·1023
18	·1024	·1024	·1039	·1014	·1000	·0998	·0993	·0994	·1000	·1000	·1012	·1022
19	·1024	·1025	·1036	·1013	·0999	·0999	·0992	·0995	·0999	·1000	·1013	·1022
20	·1024	·1024	·1034	·1012	·0996	·1000	·0992	·0994	·1001	·0999	·1012	·1021
21	·1024	·1025	·1035	·1011	·0997	·0999	·0993	·0992	·1001	·1000	·1011	·1023
22	·1024	·1025	·1037	·1011	·0998	·1001	·0995	·0993	·1002	·1000	·1012	·1023
23	·1026	·1026	·1039	·1012	·0997	·1001	·0995	·0992	·1003	·1002	·1013	·1024

TABLE XXI.—MEAN LUNAR-MONTHLY DETERMINATION of the HORIZONTAL MAGNETIC FORCE, &c.—*continued.*

1850.

Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.

Lunar Hour.	January. d h m 13. 0. 49	February. d h m 12. 1. 6	March. d h m 14. 1. 19	April. d h m 12. 0. 46	May. d h m 12. 1. 11	June. d h m 10. 0. 52	July. d h m 10. 1. 4[illegible]	August. d h m 8. 1. 22	September. d h m 6. 0. 57	October. d h m 6. 1. 2[illegible]	November. d h m 4. 0. 49	December. d h m 4. 1. 12
0	0·1043	0·1025	0·1015	0·1009	0·1011	0·0984	0·0971	0·0967	0·0978	0·0995	0·1005	0·1009
1	·1043	·1026	·1015	·1010	·1012	·0987	·0971	·0966	·0981	·0993	·1005	·1009
2	·1043	·1028	·1016	·1010	·1011	·0987	·0971	·0966	·0979	·0993	·1004	·1009
3	·1042	·1028	·1016	·1012	·1011	·0988	·0970	·0967	·0978	·0994	·1002	·1010
4	·1040	·1026	·1015	·1012	·1011	·0987	·0967	·0966	·0977	·0993	·1002	·1010
5	·1040	·1025	·1016	·1011	·1009	·0985	·0966	·0965	·0976	·0993	·1002	·1008
6	·1041	·1025	·1015	·1012	·1008	·0986	·0963	·0965	·0975	·0993	·1004	·1008
7	·1040	·1024	·1015	·1012	·1007	·0985	·0965	·0966	·0974	·0993	·1005	·1007
8	·1039	·1023	·1016	·1011	·1006	·0984	·0966	·0967	·0974	·0992	·1005	·1007
9	·1041	·1021	·1015	·1012	·1005	·0982	·0965	·0968	·0974	·0993	·1006	·1008
10	·1040	·1024	·1015	·1011	·1005	·0985	·0968	·0970	·0976	·0995	·1006	·1008
11	·1040	·1025	·1017	·1011	·1007	·0984	·0971	·0971	·0976	·0996	·1007	·1009
12	·1041	·1027	·1018	·1010	·1005	·0983	·0972	·0971	·0978	·0996	·1006	·1009
13	·1042	·1027	·1018	·1010	·1004	·0984	·0971	·0971	·0978	·0995	·1006	·1009
14	·1040	·1026	·1017	·1010	·1003	·0982	·0971	·0971	·0980	·0997	·1007	·1007
15	·1040	·1026	·1018	·1009	·1006	·0982	·0969	·0969	·0979	·0996	·1007	·1007
16	·1039	·1028	·1018	·1010	·1004	·0981	·0969	·0969	·0978	·0995	·1008	·1009
17	·1041	·1026	·1018	·1008	·1003	·0980	·0967	·0967	·0977	·0993	·1007	·1007
18	·1041	·1024	·1016	·1008	·1003	·0980	·0966	·0965	·0976	·0993	·1006	·1007
19	·1040	·1023	·1015	·1008	·1006	·0979	·0968	·0964	·0976	·0992	·1007	·1006
20	·1042	·1022	·1015	·1006	·1006	·0978	·0969	·0963	·0979	·0993	·1006	·1007
21	·1042	·1023	·1014	·1006	·1007	·0980	·0970	·0966	·0977	·0994	·1006	·1007
22	·1042	·1021	·1014	·1007	·1007	·0982	·0969	·0964	·0981	·0993	·1005	·1007
23	·1043	·1022	·1015	·1007	·1007	·0983	·0971	·0964	·0979	·0993	·1005	·1007

1851.

Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.

Lunar Hour.	January. d h m 2. 0. 46	February. d h m 1. 1. 7	March. d h m 3. 1. 17	April. d h m 1. 0. 4[illegible]	May. d h m 1. 0. 49	May. d h m 31. 1. 14	June. d h m 29. 0. 57	July. d h m 28. 0. 41	August. d h m 27. 1. 19	September. d h m 25. 0. 53	October. d h m 25. 1. 18	November. d h m 23. 0. 52	December. d h m 23. 1. 20
0	0·1038	0·1037	0·1037	0·1029	0·1017	0·0994	0·1015	0·1008	0·1022	0·1023	0·1044	0·1064	0·1042
1	·1037	·1037	·1036	·1030	·1018	·0994	·1019	·1009	·1024	·1023	·1045	·1066	·1040
2	·1036	·1038	·1035	·1029	·1019	·0993	·1019	·1009	·1024	·1024	·1045	·1066	·1040
3	·1036	·1038	·1033	·1029	·1020	·0991	·1018	·1009	·1024	·1024	·1045	·1064	·1041
4	·1035	·1038	·1035	·1027	·1021	·0987	·1018	·1008	·1022	·1024	·1044	·1064	·1041
5	·1035	·1038	·1035	·1028	·1021	·0983	·1015	·1009	·1021	·1024	·1046	·1064	·1040
6	·1035	·1038	·1034	·1027	·1021	·0982	·1013	·1008	·1019	·1024	·1045	·1064	·1038
7	·1034	·1036	·1033	·1029	·1021	·0982	·1013	·1006	·1019	·1025	·1046	·1064	·1038
8	·1033	·1038	·1034	·1029	·1023	·0982	·1013	·1006	·1020	·1026	·1046	·1064	·1036
9	·1035	·1039	·1034	·1027	·1022	·0983	·1015	·1003	·1020	·1022	·1044	·1064	·1039
10	·1035	·1039	·1035	·1028	·1024	·0983	·1015	·1004	·1019	·1024	·1044	·1065	·1041
11	·1035	·1040	·1034	·1028	·1022	·0984	·1016	·1006	·1021	·1023	·1045	·1065	·1043
12	·1035	·1042	·1037	·1030	·1021	·0987	·1016	·1004	·1021	·1023	·1045	·1067	·1042
13	·1035	·1042	·1036	·1030	·1020	·0990	·1017	·1007	·1021	·1024	·1045	·1066	·1043
14	·1036	·1043	·1037	·1032	·1019	·0990	·1017	·1009	·1020	·1022	·1044	·1066	·1043
15	·1036	·1040	·1037	·1028	·1020	·0991	·1016	·1009	·1019	·1022	·1044	·1066	·1043
16	·1035	·1040	·1036	·1029	·1021	·0987	·1015	·1008	·1017	·1021	·1043	·1065	·1043
17	·1037	·1041	·1035	·1029	·1021	·0989	·1015	·1009	·1016	·1021	·1044	·1066	·1045
18	·1037	·1039	·1034	·1029	·1020	·0989	·1015	·1008	·1017	·1023	·1044	·1065	·1045
19	·1040	·1038	·1034	·1029	·1019	·0990	·1014	·1007	·1018	·1022	·1042	·1065	·1043
20	·1040	·1039	·1034	·1028	·1018	·0991	·1017	·1007	·1019	·1022	·1043	·1062	·1042
21	·1041	·1038	·1034	·1029	·1017	·0992	·1015	·1007	·1020	·1022	·1044	·1066	·1043
22	·1042	·1039	·1035	·1029	·1016	·0992	·1015	·1009	·1022	·1022	·1043	·1066	·1045
23	·1041	·1037	·1036	·1030	·1015	·0993	·1016	·1009	·1022	·1024	·1043	·1064	·1043

TABLE XXI.—MEAN LUNAR-MONTHLY DETERMINATION of the HORIZONTAL MAGNETIC FORCE, &c.—*continued.*

1852.

Lunar Hour.	Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.											
	January. d h m 21. 1. 3	February. d h m 20. 1. 21	March. d h m 20. 0. 44	April. d h m 19. 0. 46	Ma y. d h m 19. 0. 56	June. d h m 18. 1. 24	July. d h m 17. 1. 6	August. d h m 15. 0. 45	September. d h m 14. 1. 13	October. d h m 13. 0. 44	November. d h m 12. 1. 15	December. d h m 11. 0. 56
0	0·1005	0·1008	0·1007	0·0980	0·1007	0·1000	0·0997	0·1003	0·1020	0·1025	0·1036	0·1027
1	·1008	·1010	·1007	·0982	·1007	·0999	·0998	·1001	·1023	·1023	·1037	·1025
2	·1008	·1010	·1009	·0982	·1006	·0997	·0998	·1002	·1018	·1023	·1035	·1028
3	·1010	·1009	·1007	·0980	·1005	·0995	·0998	·1005	·1019	·1025	·1037	·1031
4	·1006	·1009	·1003	·0975	·1005	·0996	·0997	·1002	·1016	·1023	·1037	·1031
5	·1006	·1011	·1005	·0974	·1007	·0993	·0996	·1006	·1016	·1024	·1037	·1030
6	·1005	·1010	·1004	·0975	·1008	·0992	·0997	·1004	·1015	·1024	·1037	·1032
7	·1005	·1010	·1001	·0975	·1007	·0993	·0997	·1005	·1017	·1024	·1035	·1033
8	·1007	·1008	·1002	·0976	·1006	·0994	·0997	·1003	·1017	·1024	·1034	·1035
9	·1007	·1009	·1002	·0975	·1004	·0992	·0998	·1002	·1017	·1025	·1036	·1037
10	·1008	·1008	·1005	·0977	·1005	·0992	·0999	·1002	·1018	·1024	·1036	·1037
11	·1010	·1011	·1004	·0977	·1005	·0993	·0998	·1001	·1019	·1025	·1034	·1037
12	·1012	·1012	·1005	·0975	·1005	·0993	·1000	·1002	·1019	·1024	·1036	·1036
13	·1012	·1012	·1005	·0975	·1004	·0992	·0998	·1003	·1021	·1024	·1034	·1035
14	·1010	·1015	·1005	·0977	·1005	·0992	·0999	·1002	·1020	·1023	·1035	·1035
15	·1009	·1014	·1004	·0978	·1005	·0991	·0999	·1001	·1020	·1024	·1035	·1034
16	·1010	·1014	·1005	·0979	·1007	·0990	·0998	·0999	·1020	·1024	·1035	·1033
17	·1007	·1012	·1008	·0980	·1006	·0989	·0998	·0998	·1020	·1026	·1036	·1031
18	·1006	·1010	·1008	·0981	·1007	·0989	·0995	·0999	·1018	·1024	·1035	·1031
19	·1006	·1011	·1005	·0982	·1007	·0992	·0996	·0999	·1019	·1025	·1035	·1026
20	·1008	·1012	·1007	·0979	·1007	·0993	·0995	·1001	·1020	·1027	·1033	·1026
21	·1010	·1011	·1005	·0980	·1008	·0993	·0996	·0999	·1020	·1026	·1034	·1027
22	·1011	·1010	·1005	·0981	·1009	·0995	·0995	·1002	·1022	·1024	·1036	·1025
23	·1009	·1008	·1005	·0982	·1008	·0996	·0997	·1003	·1020	·1025	·1036	·1028

1853.

Lunar Hour.	Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.												
	January. d h m 10. 1. 39	February. d h m 8. 1. 14	March. d h m 9. 0. 44	April. d h m 8. 0. 49	May. d h m 8. 0. 54	June. d h m 7. 1. 11	July. d h m 6. 0. 48	August. d h m 5. 1. 16	September. d h m 3. 0. 48	October. d h m 3. 1. 5	November. d h m 2. 1. 31	December. d h m 1. 1. 13	December. d h m 30. 1. 0
0	0·1012	0·1001	0·1000	0·1029	0·1033	0·1042	0·1020	0·1026	0·1024	0·1044	0·1065	0·1074	0·1027
1	·1012	·1002	·1001	·1031	·1038	·1041	·1020	·1027	·1025	·1044	·1066	·1075	·1028
2	·1013	·1003	·0998	·1028	·1038	·1039	·1019	·1026	·1027	·1043	·1066	·1075	·1030
3	·1011	·1002	·0997	·1029	·1038	·1040	·1019	·1025	·1027	·1043	·1066	·1074	·1029
4	·1012	·1002	·0999	·1027	·1039	·1040	·1017	·1026	·1025	·1042	·1067	·1075	·1029
5	·1011	·1001	·1001	·1026	·1039	·1040	·1016	·1026	·1025	·1042	·1066	·1075	·1027
6	·1012	·1003	·0998	·1024	·1042	·1041	·1014	·1025	·1024	·1040	·1066	·1075	·1026
7	·1012	·1003	·0999	·1023	·1044	·1043	·1016	·1025	·1025	·1040	·1064	·1075	·1026
8	·1010	·1002	·0997	·1024	·1046	·1043	·1016	·1026	·1026	·1039	·1064	·1075	·1025
9	·1011	·1001	·0995	·1023	·1046	·1044	·1018	·1025	·1026	·1038	·1064	·1075	·1023
10	·1012	·0999	·0999	·1024	·1048	·1045	·1018	·1026	·1027	·1039	·1063	·1076	·1021
11	·1011	·1000	·0996	·1025	·1046	·1044	·1014	·1024	·1028	·1040	·1064	·1075	·1023
12	·1012	·1001	·0992	·1025	·1046	·1045	·1016	·1028	·1026	·1039	·1063	·1074	·1021
13	·1012	·1001	·0904	·1027	·1046	·1045	·1016	·1026	·1027	·1039	·1063	·1076	·1021
14	·1013	·1002	·0996	·1029	·1046	·1045	·1016	·1027	·1028	·1041	·1063	·1075	·1021
15	·1014	·0999	·0996	·1026	·1045	·1044	·1018	·1028	·1027	·1041	·1064	·1076	·1022
16	·1011	·0999	·0995	·1025	·1042	·1042	·1017	·1024	·1024	·1041	·1064	·1075	·1023
17	·1012	·0999	·0994	·1026	·1041	·1042	·1017	·1025	·1021	·1041	·1063	·1075	·1021
18	·1012	·0999	·0992	·1025	·1040	·1045	·1017	·1025	·1022	·1041	·1064	·1077	·1022
19	·1011	·0999	·0996	·1027	·1038	·1042	·1018	·1026	·1021	·1041	·1064	·1078	·1023
20	·1011	·0998	·0994	·1026	·1037	·1042	·1017	·1026	·1019	·1040	·1066	·1078	·1024
21	·1010	·0998	·0995	·1026	·1039	·1040	·1017	·1028	·1020	·1040	·1066	·1076	·1026
22	·1009	·0999	·0999	·1026	·1038	·1040	·1015	·1024	·1020	·1042	·1068	·1075	·1028
23	·1010	·0999	·0999	·1028	·1037	·1041	·1016	·1025	·1023	·1042	·1068	·1077	·1028

TABLE XXI.—MEAN LUNAR-MONTHLY DETERMINATION of the HORIZONTAL MAGNETIC FORCE, &c.—*continued.*

1854.

Lunar Hour.	Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.											
	January. d h m 28. 0. 46	February. d h m 27. 1. 17	March. d h m 28. 0. 43	April. d h m 27. 0. 51	May. d h m 27. 1. 7	June. d h m 25. 0. 43	July. d h m 25. 1. 9	August. d h m 24. 1. 23	September. d h m 22. 0. 57	October. d h m 22. 0. 57	November. d h m 21. 1. 28	December. d h m 20. 1. 16
0	0·1026	0·1046	0·1032	0·1012	0·1013	0·1017	0·1020	0·1011	0·1041	0·1061	0·1080	0·1057
1	·1027	·1049	·1035	·1012	·1012	·1020	·1021	·1014	·1042	·1062	·1080	·1056
2	·1027	·1047	·1036	·1012	·1013	·1017	·1021	·1014	·1043	·1061	·1080	·1056
3	·1026	·1048	·1037	·1014	·1012	·1015	·1020	·1012	·1042	·1062	·1082	·1055
4	·1027	·1047	·1037	·1013	·1011	·1014	·1019	·1014	·1043	·1061	·1082	·1056
5	·1027	·1049	·1036	·1013	·1011	·1013	·1017	·1012	·1043	·1061	·1081	·1056
6	·1026	·1047	·1036	·1014	·1009	·1010	·1018	·1012	·1043	·1061	·1084	·1056
7	·1028	·1048	·1033	·1015	·1009	·1010	·1016	·1013	·1041	·1061	·1081	·1057
8	·1028	·1050	·1032	·1013	·1010	·1014	·1016	·1015	·1040	·1062	·1081	·1057
9	·1025	·1048	·1033	·1012	·1012	·1013	·1018	·1015	·1042	·1061	·1082	·1058
10	·1024	·1048	·1035	·1013	·1013	·1014	·1018	·1015	·1041	·1060	·1083	·1058
11	·1025	·1049	·1036	·1013	·1014	·1015	·1018	·1017	·1042	·1061	·1082	·1057
12	·1024	·1050	·1036	·1013	·1014	·1015	·1019	·1017	·1044	·1061	·1081	·1057
13	·1027	·1049	·1035	·1011	·1015	·1015	·1020	·1017	·1045	·1062	·1081	·1059
14	·1027	·1051	·1036	·1011	·1016	·1015	·1021	·1015	·1045	·1062	·1081	·1058
15	·1027	·1050	·1033	·1010	·1014	·1016	·1021	·1012	·1043	·1062	·1080	·1056
16	·1026	·1051	·1035	·1010	·1013	·1016	·1022	·1012	·1043	·1062	·1080	·1056
17	·1023	·1051	·1034	·1010	·1013	·1015	·1022	·1010	·1042	·1062	·1079	·1056
18	·1021	·1049	·1033	·1010	·1012	·1016	·1021	·1010	·1043	·1062	·1079	·1056
19	·1023	·1046	·1031	·1010	·1012	·1016	·1024	·1011	·1040	·1061	·1079	·1056
20	·1022	·1045	·1032	·1011	·1012	·1016	·1023	·1011	·1041	·1061	·1077	·1055
21	·1027	·1043	·1031	·1012	·1013	·1017	·1022	·1011	·1041	·1060	·1077	·1055
22	·1027	·1043	·1034	·1011	·1013	·1016	·1024	·1010	·1040	·1061	·1077	·1056
23	·1026	·1043	·1032	·1012	·1014	·1016	·1023	·1012	·1041	·1060	·1078	·1058

1855.

Lunar Hour.	Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.											
	January. d h m 18. 1. 5	February. d h m 16. 0. 46	March. d h m 18. 1. 10	April. d h m 17. 1. 25	May. d h m 16. 0. 56	June. d h m 15. 1. 27	July. d h m 14. 1. 6	August. d h m 13. 1. 23	September. d h m 11. 0. 45	October. d h m 11. 0. 44	November. d h m 10. 0. 56	December. d h m 10. 1. 35
0	0·1060	0·1019	0·1024	0·1011	0·1012	0·1027	0·1012	0·1012	0·1012	0·1020	0·1012	0·1008
1	·1061	·1022	·1025	·1009	·1013	·1025	·1014	·1012	·1012	·1018	·1011	·1010
2	·1061	·1021	·1025	·1008	·1011	·1026	·1013	·1015	·1012	·1017	·1012	·1011
3	·1062	·1022	·1025	·1011	·1012	·1028	·1011	·1014	·1014	·1019	·1012	·1013
4	·1062	·1023	·1024	·1011	·1012	·1030	·1013	·1016	·1011	·1018	·1011	·1013
5	·1062	·1023	·1025	·1011	·1015	·1028	·1013	·1018	·1010	·1017	·1011	·1014
6	·1063	·1021	·1026	·1011	·1011	·1028	·1012	·1014	·1010	·1020	·1012	·1013
7	·1063	·1020	·1024	·1011	·1009	·1029	·1010	·1011	·1008	·1018	·1012	·1014
8	·1063	·1020	·1027	·1012	·1010	·1028	·1008	·1012	·1010	·1017	·1011	·1013
9	·1063	·1019	·1027	·1011	·1012	·1025	·1010	·1010	·1010	·1017	·1010	·1014
10	·1062	·1023	·1027	·1012	·1011	·1026	·1010	·1009	·1008	·1018	·1011	·1012
11	·1062	·1022	·1027	·1012	·1015	·1029	·1011	·1010	·1009	·1020	·1010	·1012
12	·1062	·1023	·1027	·1012	·1015	·1027	·1008	·1009	·1009	·1019	·1010	·1012
13	·1059	·1021	·1028	·1012	·1015	·1025	·1011	·1009	·1010	·1019	·1010	·1012
14	·1059	·1023	·1027	·1014	·1018	·1026	·1014	·1011	·1009	·1020	·1009	·1013
15	·1060	·1021	·1027	·1013	·1016	·1024	·1013	·1010	·1009	·1018	·1009	·1011
16	·1059	·1022	·1028	·1014	·1017	·1024	·1014	·1010	·1010	·1020	·1010	·1012
17	·1057	·1021	·1026	·1013	·1014	·1023	·1015	·1009	·1010	·1019	·1009	·1011
18	·1057	·1020	·1027	·1011	·1015	·1024	·1014	·1010	·1010	·1021	·1009	·1010
19	·1056	·1019	·1026	·1010	·1014	·1022	·1013	·1011	·1011	·1020	·1008	·1009
20	·1055	·1019	·1025	·1009	·1015	·1026	·1014	·1008	·1012	·1020	·1009	·1009
21	·1055	·1019	·1023	·1008	·1015	·1026	·1015	·1007	·1011	·1020	·1010	·1008
22	·1058	·1020	·1021	·1008	·1015	·1025	·1013	·1008	·1011	·1020	·1010	·1009
23	·1058	·1019	·1025	·1011	·1013	·1025	·1015	·1011	·1013	·1020	·1012	·1008

TABLE XXI.—MEAN LUNAR-MONTHLY DETERMINATION of the HORIZONTAL MAGNETIC FORCE, &c.—*concluded.*

1856.

Lunar Hour.	Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.												
	January. d h m 8. 1. 53	February. d h m 6. 1. 5	March. d h m 7. 1. 31	April. d h m 5. 0. 57	May. d h m 5. 1. 26	June. d h m 3. 1. 6	July. d h m 2. 0. 52	August. d h m 1. 1. 22	August. d h m 30. 0. 47	September. d h m 29. 0. 46	October. d h m 29. 0. 46	November. d h m 28. 1. 8	December. d h m 27. 0. 50
0	0·1025	0·1028	0·1022	0·1038	0·1043	0·1037	0·1028	0·1025	0·1026	0·1099	0·1072	0·1083	0·1080
1	·1026	·1029	·1023	·1040	·1044	·1036	·1028	·1026	·1027	·1096	·1073	·1082	·1082
2	·1026	·1029	·1023	·1039	·1043	·1038	·1029	·1029	·1027	·1095	·1073	·1082	·1082
3	·1026	·1029	·1022	·1039	·1042	·1042	·1027	·1029	·1026	·1095	·1072	·1083	·1081
4	·1027	·1031	·1022	·1040	·1039	·1035	·1027	·1029	·1028	·1092	·1073	·1081	·1079
5	·1027	·1030	·1022	·1038	·1035	·1029	·1026	·1030	·1030	·1092	·1071	·1079	·1080
6	·1028	·1031	·1021	·1040	·1039	·1030	·1025	·1030	·1033	·1090	·1071	·1079	·1077
7	·1025	·1030	·1020	·1037	·1038	·1028	·1026	·1032	·1033	·1089	·1071	·1078	·1075
8	·1025	·1032	·1019	·1037	·1038	·1030	·1026	·1034	·1033	·1086	·1072	·1080	·1074
9	·1025	·1031	·1019	·1036	·1040	·1031	·1026	·1033	·1037	·1088	·1073	·1081	·1075
10	·1026	·1029	·1020	·1035	·1040	·1033	·1026	·1033	·1040	·1090	·1072	·1082	·1075
11	·1026	·1029	·1020	·1034	·1041	·1033	·1028	·1036	·1039	·1090	·1073	·1081	·1077
12	·1027	·1029	·1020	·1034	·1041	·1035	·1029	·1036	·1037	·1094	·1072	·1082	·1077
13	·1027	·1029	·1021	·1037	·1040	·1038	·1030	·1036	·1039	·1094	·1072	·1082	·1076
14	·1027	·1030	·1019	·1037	·1040	·1040	·1030	·1035	·1037	·1094	·1072	·1082	·1076
15	·1028	·1031	·1020	·1037	·1040	·1040	·1032	·1036	·1037	·1094	·1072	·1083	·1075
16	·1026	·1031	·1019	·1036	·1039	·1039	·1031	·1036	·1033	·1096	·1075	·1083	·1074
17	·1026	·1029	·1020	·1036	·1040	·1039	·1032	·1033	·1033	·1096	·1074	·1081	·1075
18	·1026	·1029	·1021	·1036	·1040	·1037	·1032	·1030	·1027	·1097	·1072	·1081	·1075
19	·1027	·1030	·1020	·1036	·1042	·1034	·1031	·1030	·1023	·1098	·1069	·1083	·1077
20	·1027	·1029	·1020	·1036	·1040	·1032	·1031	·1028	·1024	·1097	·1073	·1080	·1079
21	·1027	·1027	·1020	·1035	·1043	·1036	·1030	·1029	·1025	·1097	·1073	·1080	·1080
22	·1029	·1027	·1019	·1035	·1042	·1036	·1030	·1030	·1027	·1097	·1072	·1081	·1080
23	·1029	·1028	·1020	·1037	·1043	·1037	·1030	·1028	·1028	·1096	·1073	·1080	·1080

1857.

Lunar Hour.	Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.											
	January. d h m 26. 1. 27	February. d h m 24. 0. 58	March. d h m 26. 1. 15	April. d h m 24. 0. 46	May. d h m 24. 1. 30	June. d h m 22. 1. 20	July. d h m 21. 1. 4	August. d h m 20. 1. 25	September. d h m 18. 0. 45	October. d h m 18. 0. 46	November. d h m 17. 1. 0	December. d h m 17. 1. 29
0	0·1113	0·1118	0·1112	0·1078	0·1088	0·1080	0·1078	0·1081	0·1109	0·1132	0·1149	0·1132
1	·1114	·1119	·1113	·1080	·1087	·1081	·1079	·1082	·1108	·1132	·1147	·1135
2	·1113	·1119	·1111	·1079	·1085	·1081	·1080	·1083	·1107	·1130	·1148	·1137
3	·1113	·1118	·1113	·1080	·1083	·1081	·1079	·1082	·1106	·1130	·1149	·1135
4	·1114	·1118	·1110	·1081	·1082	·1079	·1080	·1082	·1107	·1130	·1150	·1137
5	·1113	·1118	·1108	·1082	·1078	·1078	·1079	·1083	·1106	·1130	·1150	·1138
6	·1114	·1116	·1106	·1084	·1079	·1078	·1081	·1084	·1107	·1130	·1150	·1137
7	·1111	·1116	·1106	·1080	·1077	·1078	·1081	·1086	·1106	·1131	·1149	·1139
8	·1110	·1116	·1104	·1083	·1078	·1078	·1079	·1087	·1106	·1132	·1150	·1143
9	·1110	·1116	·1104	·1080	·1078	·1078	·1081	·1086	·1106	·1134	·1150	·1142
10	·1111	·1117	·1103	·1077	·1078	·1077	·1081	·1089	·1108	·1135	·1149	·1142
11	·1111	·1117	·1104	·1078	·1077	·1080	·1082	·1089	·1109	·1137	·1152	·1142
12	·1112	·1118	·1105	·1079	·1076	·1079	·1084	·1088	·1109	·1137	·1153	·1144
13	·1112	·1118	·1106	·1080	·1077	·1079	·1084	·1085	·1109	·1137	·1152	·1143
14	·1112	·1119	·1107	·1080	·1078	·1079	·1083	·1088	·1108	·1133	·1151	·1140
15	·1112	·1119	·1107	·1079	·1078	·1080	·1084	·1088	·1107	·1133	·1151	·1140
16	·1114	·1120	·1106	·1078	·1081	·1080	·1083	·1086	·1106	·1132	·1150	·1139
17	·1115	·1121	·1106	·1079	·1082	·1081	·1082	·1085	·1106	·1132	·1151	·1137
18	·1114	·1121	·1106	·1079	·1083	·1080	·1082	·1084	·1106	·1131	·1149	·1136
19	·1113	·1120	·1107	·1079	·1084	·1081	·1082	·1084	·1107	·1131	·1148	·1132
20	·1114	·1118	·1108	·1077	·1085	·1079	·1080	·1084	·1105	·1132	·1148	·1132
21	·1115	·1118	·1108	·1078	·1086	·1080	·1079	·1081	·1106	·1131	·1147	·1128
22	·1114	·1118	·1109	·1079	·1087	·1080	·1079	·1080	·1106	·1131	·1147	·1129
23	·1113	·1118	·1111	·1080	·1087	·1081	·1081	·1081	·1109	·1134	·1148	·1131

TABLE XXII.—MEAN, through the RANGE of LUNATIONS, of the LUNATION-MEAN DETERMINATIONS of the LUNO-DIURNAL INEQUALITY of HORIZONTAL FORCE; exhibited separately for the different Years; with the Mean for all the Years.

Lunar Hour.	Mean Luno-Diurnal Inequality in each Year.										Mean 1848 to 1857
	1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.	
0	−0·00004	−0·00005	+0·00008	+0·00005	+0·00005	+0·00007	−0·00003	−0·00002	+0·00001	+0·00001	+0·000013
1	− 6	− 2	+ 13	+ 12	+ 9	+ 14	+ 8	+ 1	+ 5	+ 7	+ 62
2	− 2	+ 12	+ 13	+ 11	+ 6	+ 11	+ 6	+ 1	+ 8	+ 3	+ 69
3	+ 2	+ 17	+ 13	+ 7	+ 10	+ 8	+ 4	+ 10	+ 6	6	+ 77
4	− 1	+ 13	+ 3	+ 1	− 8	+ 5	+ 3	+ 11	− 5	+ 1	+ 23
5	− 6	+ 7	− 5	− 3	− 3	+ 5	− 1	+ 13	− 12	− 5	− 10
6	− 1	+ 2	− 6	− 12	− 5	− 2	− 3	+ 8	− 9	− 2	− 30
7	− 5	+ 3	− 8	− 13	− 6	− 1	− 7	− 2	− 13	− 7	− 64
8	− 2	+ 3	− 10	− 10	− 5	− 1	− 2	0	− 15	− 2	− 44
9	+ 2	+ 2	− 10	− 12	− 4	0	− 1	− 2	− 8	− 3	− 36
10	+ 2	+ 2	+ 1	− 5	+ 2	+ 3	+ 2	− 2	− 3	− 2	0
11	+ 10	+ 6	+ 10	− 1	+ 4	− 2	+ 7	+ 7	+ 2	+ 8	+ 51
12	+ 11	+ 8	+ 12	+ 5	+ 8	− 4	+ 9	+ 2	+ 6	+ 12	+ 69
13	+ 12	+ 9	+ 11	+ 10	+ 5	− 1	+ 13	0	+ 12	+ 11	+ 82
14	+ 11	+ 3	+ 8	+ 12	+ 8	+ 7	+ 15	+ 10	+ 11	+ 8	+ 93
15	+ 13	+ 3	+ 5	+ 6	+ 4	+ 5	+ 3	0	+ 15	+ 8	+ 62
16	+ 10	0	+ 4	− 2	+ 4	− 9	+ 5	+ 8	+ 10	+ 5	+ 35
17	0	− 3	− 7	+ 4	+ 2	− 12	− 2	− 3	+ 7	+ 7	− 7
18	+ 2	− 6	− 16	+ 2	− 5	− 10	− 7	− 2	− 2	+ 2	− 42
19	− 5	− 8	− 15	− 2	− 5	− 3	− 9	− 10	− 4	− 1	− 62
20	− 13	− 15	− 13	− 1	− 1	− 8	− 12	− 8	− 7	− 6	− 84
21	− 12	− 13	− 8	+ 3	+ 1	− 5	− 9	− 12	− 2	− 10	− 67
22	− 7	− 5	− 8	+ 9	+ 2	− 4	− 7	− 11	0	− 8	− 39
23	− 2	+ 3	− 5	+ 9	+ 7	+ 6	− 4	− 1	+ 3	+ 4	+ 20

REDUCTIONS OF MAGNETIC VERTICAL FORCE REFERRED TO THE MOON'S PLACE.

TABLE XXIII.—MEAN LUNATION-INEQUALITY of the MAGNETIC VERTICAL FORCE, exhibited separately for the different Years, with the Mean for all the Years.

Day of the Lunation.	Mean Lunation-Inequality in each Year.									Mean 1849 to 1857.
	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.	
1	− 0·0002	+ 0·0001	+ 0·0004	+ 0·0005	0·0000	− 0·0008	− 0·0005	0·0000	+ 0·0002	− 0·00003
2	− 20	0	+ 1	+ 1	− 4	− 7	− 9	− 24	− 5	− 74
3	+ 4	− 3	+ 1	+ 6	+ 6	− 2	+ 2	− 1	− 13	0
4	− 11	0	0	+ 4	+ 7	0	+ 7	− 6	− 7	− 7
5	− 5	+ 6	− 5	+ 4	+ 1	− 10	− 13	− 5	− 3	− 33
6	− 24	− 10	− 2	− 9	+ 5	− 2	− 7	+ 3	− 7	− 59
7	0	+ 5	− 6	0	0	− 6	+ 4	0	+ 5	+ 2
8	0	0	+ 1	+ 3	+ 7	− 6	− 7	+ 4	+ 11	+ 14
9	− 5	− 2	− 4	− 5	+ 9	− 5	0	− 8	− 4	− 27
10	+ 8	− 5	− 6	+ 6	+ 10	− 7	− 5	− 6	− 10	− 17
11	+ 4	+ 1	+ 2	+ 1	− 13	− 3	− 10	+ 14	− 8	− 13
12	+ 13	− 3	− 5	+ 11	− 6	− 9	0	+ 1	− 4	− 2
13	− 2	+ 1	− 4	+ 14	+ 3	− 2	− 2	− 17	− 6	− 17
14	+ 5	+ 4	− 3	0	− 14	0	+ 1	+ 9	− 5	− 3
15	− 6	− 12	+ 5	− 1	+ 1	+ 1	+ 9	− 2	+ 15	+ 11
16	+ 7	− 3	+ 4	+ 2	+ 2	+ 2	0	+ 1	− 7	+ 9
17	+ 8	+ 3	+ 3	+ 1	− 3	− 6	− 4	− 4	− 7	− 10
18	+ 8	− 6	+ 6	− 4	+ 14	− 3	+ 6	+ 12	0	+ 37
19	+ 10	0	+ 1	− 3	+ 7	+ 4	+ 4	+ 16	0	+ 43
20	− 1	+ 1	+ 10	− 10	+ 3	+ 9	+ 12	− 3	+ 2	+ 26
21	+ 3	− 1	+ 11	− 1	− 1	+ 18	+ 16	− 6	+ 19	+ 78
22	− 5	+ 4	− 4	− 5	− 15	− 3	+ 3	+ 10	− 7	− 24
23	− 3	0	− 5	+ 2	− 1	+ 3	− 9	+ 13	+ 35	+ 17
24	− 5	+ 1	− 1	− 4	− 9	+ 7	− 16	− 8	+ 32	+ 3
25	0	+ 2	+ 1	− 2	− 18	+ 8	− 1	− 11	+ 1	− 22
26	+ 12	0	− 3	− 10	− 4	+ 8	+ 14	+ 2	− 1	+ 20
27	+ 5	+ 9	+ 4	− 20	− 1	+ 5	− 3	+ 5	− 4	+ 7
28	− 10	+ 5	− 2	− 13	+ 11	+ 1	+ 1	− 1	0	− 9
29	+ 7	− 3	0	+ 29	+ 16	− 1	+ 16	+ 4	+ 1	+ 68

TABLE XXIV.—MEAN LUNAR-MONTHLY DETERMINATION of the VERTICAL MAGNETIC FORCE, uncorrected for Temperature, at every Lunar Hour of the Lunar Day, obtained by taking the Mean of all the Determinations at the same Lunar Hour through each Lunation.

1849.

Lunar Hour.	Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.											
	January. d h m 24. 0. 54	February. d h m 23. 1. 15	March. d h m 24. 0. 45	April. d h m 23. 1. 12	May. d h m 22. 0. 52	June. d h m 21. 1. 38	July. d h m 20. 1. 20	August. d h m 18. 0. 57	September. d h m 17. 1. 18	October. d h m 16. 0. 44	November. d h m 15. 0. 58	December. d h m 15. 1. 17
0	0·0260	0·0231	0·0208	0·0257	0·0258	0·0239	0·0206	0·0216	0·0243	0·0273	0·0269	0·0229
1	·0259	·0233	·0207	·0259	·0259	·0238	·0207	·0215	·0242	·0276	·0269	·0230
2	·0259	·0233	·0204	·0261	·0257	·0237	·0208	·0214	·0240	·0277	·0264	·0230
3	·0259	·0230	·0208	·0264	·0257	·0237	·0210	·0213	·0242	·0276	·0265	·0229
4	·0260	·0229	·0207	·0261	·0257	·0236	·0213	·0214	·0242	·0278	·0264	·0228
5	·0259	·0228	·0211	·0262	·0258	·0236	·0213	·0214	·0241	·0278	·0265	·0227
6	·0259	·0228	·0211	·0257	·0261	·0237	·0213	·0215	·0241	·0277	·0267	·0229
7	·0259	·0228	·0211	·0260	·0258	·0239	·0214	·0216	·0241	·0275	·0265	·0228
8	·0257	·0229	·0212	·0260	·0257	·0240	·0212	·0216	·0244	·0274	·0265	·0228
9	·0257	·0229	·0210	·0256	·0256	·0241	·0210	·0215	·0243	·0273	·0264	·0225
10	·0258	·0229	·0211	·0251	·0258	·0241	·0208	·0215	·0244	·0273	·0265	·0223
11	·0256	·0229	·0209	·0251	·0258	·0241	·0206	·0213	·0244	·0273	·0265	·0222
12	·0255	·0228	·0206	·0248	·0256	·0241	·0204	·0212	·0245	·0272	·0266	·0215
13	·0255	·0228	·0210	·0249	·0255	·0240	·0203	·0212	·0246	·0272	·0267	·0215
14	·0254	·0227	·0211	·0248	·0254	·0239	·0203	·0212	·0247	·0272	·0268	·0214
15	·0255	·0227	·0212	·0246	·0254	·0239	·0202	·0213	·0249	·0272	·0270	·0214
16	·0255	·0229	·0216	·0248	·0254	·0239	·0202	·0213	·0249	·0271	·0271	·0215
17	·0255	·0229	·0215	·0249	·0253	·0239	·0202	·0214	·0248	·0271	·0273	·0217
18	·0254	·0227	·0215	·0247	·0251	·0241	·0203	·0214	·0248	·0269	·0274	·0223
19	·0252	·0223	·0213	·0250	·0251	·0241	·0203	·0214	·0248	·0270	·0273	·0225
20	·0252	·0223	·0206	·0252	·0250	·0240	·0206	·0214	·0249	·0270	·0273	·0228
21	·0254	·0227	·0206	·0255	·0252	·0238	·0207	·0215	·0249	·0269	·0270	·0232
22	·0254	·0227	·0205	·0257	·0254	·0236	·0209	·0216	·0248	·0270	·0269	·0234
23	·0257	·0229	·0211	·0261	·0254	·0235	·0211	·0217	·0247	·0271	·0268	·0236

1850.

Lunar Hour.	Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.											
	January. d h m 13. 0. 49	February. d h m 12. 1. 6	March. d h m 14. 1. 19	April. d h m 12. 0. 46	May. d h m 12. 1. 11	June. d h m 10. 0. 52	July. d h m 10. 1. 40	August. d h m 8. 1. 22	September. d h m 6. 0. 57	October. d h m 6. 1. 20	November. d h m 4. 0. 49	December. d h m 4. 1. 12
0	0·0237	0·0237	0·0226	0·0224	0·0217	0·0215	0·0237	0·0236	0·0225	0·0217	0·0224	0·0226
1	·0236	·0238	·0227	·0225	·0217	·0218	·0238	·0236	·0224	·0217	·0225	·0226
2	·0235	·0237	·0229	·0225	·0217	·0215	·0239	·0237	·0222	·0217	·0225	·0226
3	·0233	·0235	·0230	·0226	·0217	·0215	·0238	·0236	·0222	·0217	·0225	·0226
4	·0233	·0234	·0231	·0225	·0218	·0215	·0238	·0237	·0221	·0219	·0226	·0226
5	·0233	·0233	·0231	·0226	·0219	·0214	·0239	·0237	·0221	·0221	·0225	·0227
6	·0231	·0233	·0230	·0225	·0217	·0213	·0240	·0238	·0223	·0223	·0224	·0229
7	·0229	·0233	·0229	·0226	·0214	·0212	·0239	·0239	·0222	·0224	·0224	·0230
8	·0230	·0231	·0229	·0226	·0214	·0212	·0239	·0239	·0224	·0225	·0224	·0231
9	·0230	·0230	·0227	·0225	·0215	·0211	·0239	·0237	·0226	·0226	·0224	·0233
10	·0229	·0230	·0226	·0223	·0215	·0212	·0240	·0237	·0227	·0226	·0224	·0234
11	·0229	·0229	·0227	·0223	·0216	·0212	·0241	·0236	·0229	·0226	·0224	·0234
12	·0230	·0230	·0227	·0222	·0217	·0210	·0241	·0237	·0232	·0225	·0224	·0236
13	·0233	·0230	·0227	·0222	·0212	·0210	·0241	·0235	·0232	·0224	·0224	·0237
14	·0233	·0231	·0227	·0222	·0214	·0210	·0241	·0234	·0233	·0224	·0225	·0236
15	·0233	·0233	·0225	·0220	·0218	·0206	·0240	·0233	·0232	·0222	·0226	·0236
16	·0234	·0234	·0225	·0219	·0218	·0207	·0241	·0234	·0230	·0220	·0227	·0234
17	·0234	·0235	·0226	·0218	·0218	·0208	·0241	·0233	·0228	·0217	·0228	·0233
18	·0235	·0236	·0226	·0218	·0218	·0209	·0240	·0232	·0227	·0217	·0228	·0231
19	·0235	·0237	·0225	·0216	·0218	·0210	·0240	·0231	·0226	·0217	·0228	·0229
20	·0235	·0237	·0225	·0218	·0217	·0212	·0239	·0232	·0225	·0218	·0228	·0228
21	·0237	·0238	·0225	·0219	·0217	·0214	·0237	·0234	·0223	·0218	·0226	·0227
22	·0236	·0238	·0225	·0221	·0217	·0216	·0237	·0235	·0223	·0218	·0227	·0226
23	·0237	·0238	·0224	·0224	·0217	·0216	·0238	·0237	·0225	·0217	·0226	·0227

TABLE XXIV.—MEAN LUNAR-MONTHLY DETERMINATION of the VERTICAL MAGNETIC FORCE, &c.—*continued.*

1851.

Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.

Lunar Hour.	January. d h m 2. 0. 46	February. d h m 1. 1. 7	March. d h m 3. 1. 17	April. d h m 1. 0. 40	May. d h m 1. 0. 49	May. d h m 31. 1. 14	June. d h m 29. 0. 57	July. d h m 28. 0. 41	August. d h m 27. 1. 19	September. d h m 25. 0. 53	October. d h m 25. 1. 1	November. d h m [illegible]	December. d h m [illegible]
0	0·0252	0·0253	0·0246	0·0254	0·0255	0·0245	0·0211	0·0228	0·0220	0·0198	0·0192	0·0200	0·0195
1	·0250	·0253	·0245	·0252	·0253	·0244	·0213	·0229	·0220	·0199	·0188	·0199	·0196
2	·0254	·0253	·0244	·0250	·0251	·0243	·0214	·0229	·0220	·0201	·0189	·0200	·0197
3	·0252	·0252	·0243	·0248	·0249	·0243	·0214	·0229	·0220	·0202	·0189	·0200	·0196
4	·0251	·0252	·0242	·0247	·0247	·0244	·0214	·0229	·0217	·0203	·0191	·0200	·0192
5	·0250	·0252	·0242	·0247	·0245	·0244	·0213	·0229	·0216	·0203	·0190	·0201	·0192
6	·0251	·0251	·0241	·0246	·0244	·0244	·0212	·0228	·0214	·0202	·0192	·0202	·0192
7	·0251	·0251	·0242	·0248	·0244	·0245	·0213	·0227	·0212	·0201	·0193	·0202	·0192
8	·0251	·0250	·0242	·0248	·0245	·0245	·0214	·0226	·0211	·0200	·0193	·0203	·0194
9	·0250	·0250	·0243	·0248	·0245	·0247	·0215	·0226	·0208	·0199	·0193	·0204	·0193
10	·0251	·0249	·0243	·0249	·0247	·0248	·0217	·0225	·0208	·0200	·0192	·0205	·0194
11	·0251	·0249	·0242	·0251	·0248	·0249	·0217	·0224	·0207	·0202	·0190	·0205	·0195
12	·0252	·0248	·0243	·0252	·0250	·0250	·0216	·0223	·0206	·0202	·0188	·0207	·0195
13	·0252	·0247	·0243	·0254	·0251	·0249	·0213	·0224	·0207	·0200	·0186	·0208	·0196
14	·0252	·0249	·0245	·0255	·0251	·0249	·0211	·0223	·0211	·0198	·0189	·0208	·0198
15	·0251	·0250	·0246	·0256	·0253	·0248	·0212	·0225	·0214	·0196	·0190	·0208	·0199
16	·0251	·0250	·0247	·0257	·0251	·0248	·0213	·0227	·0214	·0193	·0191	·0207	·0200
17	·0252	·0252	·0246	·0259	·0251	·0248	·0214	·0227	·0216	·0192	·0190	·0206	·0200
18	·0251	·0253	·0246	·0259	·0252	·0248	·0215	·0226	·0213	·0192	·0189	·0206	·0201
19	·0252	·0254	·0246	·0258	·0252	·0248	·0214	·0225	·0214	·0193	·0189	·0205	·0202
20	·0254	·0256	·0246	·0258	·0252	·0248	·0212	·0224	·0215	·0194	·0189	·0204	·0202
21	·0254	·0254	·0247	·0257	·0252	·0247	·0212	·0224	·0216	·0196	·0189	·0204	·0200
22	·0253	·0255	·0247	·0257	·0254	·0247	·0212	·0225	·0218	·0196	·0188	·0204	·0199
23	·0253	·0255	·0247	·0255	·0255	·0246	·0213	·0226	·0220	·0197	·0188	·0204	·0193

1852.

Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.

Lunar Hour.	January. d h m 21. 1. 3	February. d h m 20. 1. 21	March. d h m 20. 0. 44	April. d h m 19. 0. 46	May. d h m 19. 0. 50	June. d h m 18. 1. 24	July. d h m 17. 1. 0	August. d h m 15. 0. 45	September. d h m 14. 1. 13	October. d h m 13. [illegible]	November. d h m 12. 1. 1	December. d h m 11. 0. 56
0	0·0213	0·0215	0·0214	0·0221	0·0216	0·0198	0·0172	0·0258	0·0248	0·0252	0·0217	0·0218
1	·0213	·0216	·0213	·0217	·0220	·0199	·0173	·0259	·0248	·0253	·0217	·0217
2	·0213	·0216	·0212	·0223	·0221	·0200	·0172	·0260	·0247	·0251	·0220	·0217
3	·0213	·0215	·0213	·0224	·0222	·0199	·0171	·0259	·0246	·0251	·0221	·0217
4	·0214	·0214	·0213	·0224	·0222	·0199	·0171	·0258	·0247	·0251	·0222	·0215
5	·0213	·0212	·0213	·0226	·0220	·0196	·0171	·0257	·0247	·0252	·0223	·0219
6	·0213	·0210	·0213	·0224	·0221	·0195	·0174	·0257	·0248	·0253	·0223	·0221
7	·0213	·0207	·0213	·0224	·0221	·0191	·0175	·0256	·0248	·0254	·0223	·0223
8	·0213	·0207	·0213	·0222	·0222	·0191	·0174	·0256	·0251	·0257	·0222	·0224
9	·0212	·0206	·0214	·0223	·0223	·0192	·0173	·0254	·0253	·0260	·0221	·0225
10	·0213	·0208	·0215	·0222	·0222	·0195	·0173	·0253	·0254	·0259	·0222	·0226
11	·0214	·0208	·0216	·0220	·0221	·0192	·0172	·0252	·0254	·0261	·0220	·0228
12	·0213	·0208	·0217	·0220	·0220	·0191	·0171	·0251	·0256	·0263	·0219	·0232
13	·0213	·0208	·0219	·0220	·0216	·0188	·0171	·0251	·0257	·0266	·0219	·0232
14	·0212	·0207	·0219	·0223	·0213	·0192	·0170	·0251	·0258	·0265	·0219	·0232
15	·0212	·0206	·0218	·0226	·0214	·0194	·0169	·0250	·0258	·0266	·0218	·0232
16	·0210	·0208	·0218	·0228	·0209	·0195	·0169	·0251	·0255	·0266	·0215	·0233
17	·0208	·0208	·0218	·0228	·0206	·0197	·0170	·0251	·0255	·0262	·0218	·0232
18	·0209	·0209	·0217	·0227	·0206	·0196	·0170	·0252	·0255	·0262	·0217	·0228
19	·0209	·0211	·0216	·0226	·0208	·0196	·0169	·0253	·0256	·0260	·0217	·0227
20	·0210	·0211	·0217	·0226	·0209	·0194	·0170	·0254	·0256	·0259	·0216	·0224
21	·0212	·0212	·0218	·0227	·0209	·0194	·0171	·0252	·0256	·0255	·0215	·0220
22	·0212	·0213	·0219	·0227	·0213	·0194	·0173	·0254	·0254	·0254	·0216	·0220
23	·0212	·0213	·0215	·0225	·0216	·0197	·0174	·0255	·0250	·0253	·0218	·0219

TABLE XXIV.—MEAN LUNAR-MONTHLY DETERMINATION of the VERTCAL MAGNETIC FORCE, &c.—*continued.*

1853.

Lunar Hour.	Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	December.
	d h m 10. 1. 39	d h m 8. 1. 14	d h m 9. 0. 44	d h m 8. 0. 49	d h m 8. 0. 54	d h m 7. 1. 11	d h m 6. 0. 48	d h m 5. 1. 16	d h m 3. 0. 48	d h m 3. 1. 5	d h m 2. 1. 31	d h m 1. 1. 13	d h m 30. 1. 0
0	0·0226	0·0198	0·0187	0·0216	0·0213	0·0218	0·0229	0·0223	0·0217	0·0209	0·0201	0·0213	0·0240
1	·0230	·0194	·0186	·0214	·0214	·0213	·0227	·0225	·0218	·0209	·0203	·0212	·0237
2	·0232	·0193	·0185	·0208	·0214	·0216	·0227	·0227	·0218	·0210	·0204	·0212	·0238
3	·0232	·0188	·0176	·0202	·0214	·0217	·0226	·0228	·0217	·0209	·0206	·0212	·0237
4	·0229	·0186	·0175	·0200	·0210	·0217	·0227	·0229	·0217	·0209	·0208	·0212	·0238
5	·0227	·0184	·0173	·0198	·0208	·0218	·0227	·0230	·0218	·0208	·0209	·0211	·0239
6	·0224	·0183	·0171	·0198	·0208	·0218	·0229	·0232	·0219	·0212	·0210	·0211	·0239
7	·0220	·0182	·0170	·0197	·0207	·0217	·0229	·0232	·0220	·0213	·0211	·0211	·0238
8	·0216	·0180	·0170	·0198	·0206	·0216	·0231	·0232	·0217	·0214	·0213	·0211	·0239
9	·0218	·0181	·0169	·0198	·0205	·0216	·0232	·0235	·0217	·0214	·0214	·0211	·0238
10	·0213	·0181	·0169	·0201	·0204	·0215	·0232	·0230	·0217	·0214	·0213	·0211	·0237
11	·0206	·0179	·0170	·0202	·0203	·0213	·0233	·0228	·0215	·0214	·0212	·0211	·0236
12	·0196	·0178	·0172	·0203	·0204	·0211	·0235	·0227	·0215	·0215	·0209	·0212	·0235
13	·0199	·0179	·0176	·0206	·0204	·0212	·0237	·0228	·0216	·0215	·0207	·0212	·0236
14	·0199	·0178	·0180	·0209	·0206	·0213	·0238	·0228	·0215	·0213	·0206	·0213	·0235
15	·0200	·0180	·0181	·0213	·0209	·0213	·0236	·0228	·0215	·0213	·0205	·0211	·0236
16	·0204	·0184	·0182	·0215	·0210	·0213	·0235	·0227	·0215	·0212	·0204	·0211	·0236
17	·0208	·0190	·0185	·0215	·0211	·0213	·0234	·0227	·0212	·0213	·0202	·0210	·0234
18	·0203	·0192	·0189	·0217	·0210	·0214	·0232	·0226	·0211	·0212	·0201	·0212	·0233
19	·0207	·0194	·0188	·0216	·0210	·0215	·0230	·0225	·0210	·0211	·0199	·0211	·0233
20	·0212	·0194	·0190	·0213	·0210	·0215	·0229	·0222	·0212	·0211	·0198	·0210	·0233
21	·0216	·0191	·0193	·0213	·0211	·0219	·0228	·0222	·0213	·0210	·0198	·0210	·0232
22	·0221	·0194	·0189	·0215	·0210	·0221	·0228	·0224	·0214	·0210	·0198	·0212	·0234
23	·0226	·0200	·0185	·0214	·0210	·0221	·0229	·0225	·0214	·0209	·0199	·0213	·0236

1854.

Lunar Hour.	Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	d h m 28. 0. 46	d h m 27. 1. 17	d h m 28. 0. 43	d h m 27. 0. 51	d h m 27. 1. 7	d h m 25. 0. 43	d h m 25. 1. 9	d h m 24. 1. 23	d h m 22. 0. 47	d h m 22. 0. 57	d h m 21. 1. 28	d h m 20. 1. 16
0	0·0246	0·0245	0·0261	0·0250	0·0249	0·0203	0·0216	0·0211	0·0205	0·0206	0·0209	0·0219
1	·0246	·0245	·0261	·0250	·0250	·0202	·0218	·0214	·0205	·0208	·0205	·0219
2	·0247	·0243	·0258	·0251	·0249	·0200	·0218	·0215	·0206	·0208	·0203	·0219
3	·0248	·0242	·0261	·0252	·0247	·0199	·0215	·0216	·0205	·0208	·0202	·0220
4	·0247	·0243	·0260	·0253	0250	·0202	·0213	·0217	·0204	·0208	·0199	·0221
5	·0247	·0244	·0256	·0253	·0245	·0203	·0211	·0215	·0203	·0207	·0200	·0220
6	·0249	·0245	·0254	·0252	·0246	·0204	·0210	·0215	·0204	·0206	·0203	·0219
7	·0249	·0245	·0254	·0249	·0246	·0205	·0207	·0214	·0203	·0208	·0203	·0219
8	·0248	·0244	·0255	·0248	·0246	·0206	·0207	·0213	·0203	·0206	·0206	·0220
9	·0248	·0243	·0257	·0247	·0248	·0207	·0207	·0212	·0205	·0208	·0207	·0221
10	·0248	·0243	·0256	·0247	·0248	·0209	·0208	·0212	·0206	·0206	·0208	·0221
11	·0247	·0244	·0258	·0247	·0248	·0211	·0213	·0212	·0206	·0208	·0207	·0221
12	·0248	·0245	·0258	·0247	·0249	·0211	·0211	·0211	·0209	·0208	·0207	·0221
13	·0249	·0245	·0257	·0247	·0249	·0212	·0211	·0209	·0211	·0207	·0208	·0220
14	·0249	·0245	·0260	·0246	·0252	·0213	·0208	·0209	·0212	·0206	·0209	·0221
15	·0247	·0244	·0260	·0246	·0248	·0213	·0209	·0209	·0210	·0206	·0212	·0225
16	·0249	·0242	·0263	·0247	·0248	·0213	·0210	·0208	·0210	·0205	·0211	·0222
17	·0248	·0243	·0265	·0246	·0248	·0213	·0211	·0208	·0210	·0205	·0211	·0224
18	·0248	·0244	·0267	·0247	·0246	·0212	·0213	·0207	·0210	·0205	·0210	·0226
19	·0248	·0247	·0266	·0246	·0247	·0211	·0216	·0207	·0210	·0207	·0210	·0225
20	·0246	·0249	·0263	·0245	·0247	·0210	·0216	·0206	·0211	·0209	·0211	·0225
21	·0247	·0250	·0263	·0246	·0245	·0207	·0216	·0206	·0210	·0211	·0210	·0224
22	·0247	·0251	·0261	·0247	·0244	·0204	·0215	·0210	·0209	·0211	·0209	·0223
23	·0247	·0249	·0260	·0248	·0245	·0205	·0215	·0212	·0211	·0210	·0208	·0222

TABLE XXIV.—MEAN LUNAR-MONTHLY DETERMINATION of the VERTICAL MAGNETIC FORCE, &c.—*continued.*

1855.

Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.

Lunar Hour.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	d h m 18. 1. 5	d h m 16. 0. 46	d h m 18. 1. 15	d h m 17. 1. 25	d h m 16. 0. 56	d h m 15. 1. 27	d h m 14. 1. 6	d h m 13. 1. 23	d h m 11. 0. 41	d h m 11. 0. 44	d h m 10. 0. 56	d h m 10. 1. 35
0	0·0211	0·0217	0·0229	0·0217	0·0222	0·0216	0·0204	0·0207	0·0203	0·0171	0·0190	0·0198
1	·0211	·0217	·0228	·0218	·0221	·0217	·0205	·0207	·0202	·0173	·0191	·0199
2	·0210	·0218	·0227	·0219	·0221	·0216	·0206	·0207	·0201	·0173	·0190	·0199
3	·0209	·0219	·0228	·0223	·0218	·0214	·0206	·0206	·0202	·0173	·0190	·0199
4	·0209	·0220	·0228	·0225	·0217	·0214	·0206	·0205	·0202	·0171	·0191	·0202
5	·0210	·0221	·0228	·0227	·0214	·0214	·0205	·0203	·0202	·0170	·0191	·0202
6	·0210	·0221	·0230	·0227	·0213	·0214	·0205	·0200	·0203	·0170	·0190	·0203
7	·0211	·0222	·0233	·0231	·0212	·0214	·0207	·0207	·0201	·0173	·0189	·0201
8	·0212	·0224	·0235	·0233	·0212	·0218	·0205	·0206	·0201	·0173	·0189	·0200
9	·0211	·0223	·0236	·0234	·0211	·0216	·0207	·0203	·0200	·0173	·0189	·0201
10	·0210	·0226	·0237	·0235	·0211	·0216	·0207	·0200	·0198	·0173	·0188	·0201
11	·0210	·0225	·0237	·0233	·0211	·0217	·0205	·0198	·0198	·0173	·0188	·0201
12	·0210	·0223	·0238	·0229	·0215	·0216	·0208	·0199	·0198	·0174	·0188	·0201
13	·0210	·0220	·0239	·0228	·0218	·0211	·0209	·0202	·0198	·0175	·0187	·0202
14	·0210	·0218	·0239	·0227	·0221	·0211	·0208	·0205	·0200	·0174	·0188	·0204
15	·0210	·0218	·0240	·0227	·0223	·0212	·0209	·0206	·0200	·0174	·0188	·0204
16	·0210	·0217	·0239	·0226	·0226	·0213	·0210	·0209	·0200	·0174	·0188	·0205
17	·0210	·0217	·0237	·0225	·0227	·0215	·0211	·0210	·0199	·0177	·0187	·0204
18	·0210	·0217	·0236	·0224	·0226	·0214	·0212	·0209	·0197	·0171	·0187	·0203
19	·0211	·0218	·0234	·0222	·0225	·0213	·0211	·0207	·0199	·0169	·0188	·0200
20	·0211	·0218	·0232	·0220	·0225	·0214	·0212	·0210	·0201	·0170	·0188	·0200
21	·0210	·0218	·0232	·0221	·0227	·0216	·0212	·0210	·0203	·0173	·0188	·0200
22	·0209	·0217	·0230	·0220	·0226	·0216	·0211	·0209	·0204	·0173	·0189	·0200
23	·0210	·0216	·0232	·0219	·0225	·0215	·0211	·0207	·0205	·0174	·0189	·0201

1856.

Göttingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.

Lunar Hour.	January.	February.	March.	April.	May.	June.	July.	August.	August.	September.	October.	November.	December.
	d h m 8. 1. 23	d h m 6. 1. 5	d h m 7. 1. 31	d h m 5. 0. 57	d h m 5. 1. 24	d h m 3. 1. 6	d h m 2. 0. 52	d h m 1. 1. 22	d h m 30. 0. 47	d h m 29. 0. 45	d h m 29. 0 46	d h m 28. 1. 8	d h m 27. [illegible]
0	0·0212	0·0223	0·0214	0·0226	0·0217	0·0207	0·0144	0·0114	0·0091	0·0106	0·0100	0·0130	0·0125
1	·0211	·0223	·0214	·0227	·0218	·0204	·0143	·0117	·0094	·0101	·0101	·0130	·0125
2	·0211	·0221	·0214	·0229	·0219	·0204	·0141	·0121	·0094	·0101	·0102	·0128	·0128
3	·0212	·0220	·0215	·0231	·0222	·0204	·0139	·0123	·0095	·0101	·0102	·0129	·0129
4	·0213	·0223	·0216	·0231	·0222	·0205	·0137	·0123	·0095	·0101	·0103	·0128	·0130
5	·0212	·0225	·0216	·0231	·0224	·0202	·0137	·0123	·0095	·0101	·0103	·0128	·0130
6	·0212	·0225	·0216	·0231	·0222	·0202	·0137	·0127	·0095	·0100	·0103	·0127	·0130
7	·0215	·0225	·0216	·0230	·0219	·0200	·0137	·0126	·0096	·0098	·0104	·0125	·0129
8	·0214	·0224	·0216	·0228	·0218	·0200	·0140	·0129	·0096	·0098	·0105	·0123	·0129
9	·0213	·0224	·0216	·0228	·0216	·0201	·0143	·0134	·0097	·0099	·0105	·0119	·0127
10	·0212	·0223	·0215	·0227	·0216	·0198	·0147	·0136	·0099	·0101	·0105	·0120	·0126
11	·0210	·0222	·0216	·0227	·0213	·0202	·0151	·0136	·0100	·0102	·0104	·0120	·0126
12	·0208	·0220	·0217	·0226	·0213	·0206	·0153	·0135	·0100	·0103	·0103	·0120	·0125
13	·0206	·0218	·0217	·0225	·0214	·0208	·0155	·0135	·0101	·0108	·0103	·0121	·0123
14	·0205	·0218	·0217	·0225	·0211	·0211	·0156	·0130	·0100	·0109	·0103	·0121	·0123
15	·0206	·0218	·0217	·0224	·0212	·0211	·0157	·0128	·0099	·0114	·0102	·0121	·0124
16	·0207	·0221	·0216	·0225	·0213	·0210	·0159	·0125	·0097	·0115	·0102	·0121	·0125
17	·0207	·0223	·0217	·0223	·0214	·0209	·0158	·0123	·0096	·0117	·0103	·0121	·0126
18	·0209	·0224	·0218	·0222	·0214	·0208	·0158	·0124	·0094	·0117	·0105	·0122	·0127
19	·0208	·0223	·0218	·0222	·0215	·0205	·0156	·0117	·0093	·0117	·0105	·0122	·0127
20	·0210	·0222	·0219	·0222	·0216	·0203	·0152	·0118	·0093	·0119	·0103	·0123	·0128
21	·0211	·0222	·0217	·0222	·0216	·0204	·0154	·0114	·0091	·0116	·0102	·0123	·0127
22	·0211	·0222	·0214	·0222	·0217	·0204	·0148	·0111	·0088	·0114	·0103	·0125	·0127
23	·0212	·0222	·0213	·0224	·0217	·0205	·0144	·0113	·0089	·0113	·0105	·0127	·0127

TABLE XXIV.—MEAN LUNAR-MONTHLY DETERMINATION of the VERTICAL MAGNETIC FORCE, &c.—*concluded.*

1857.

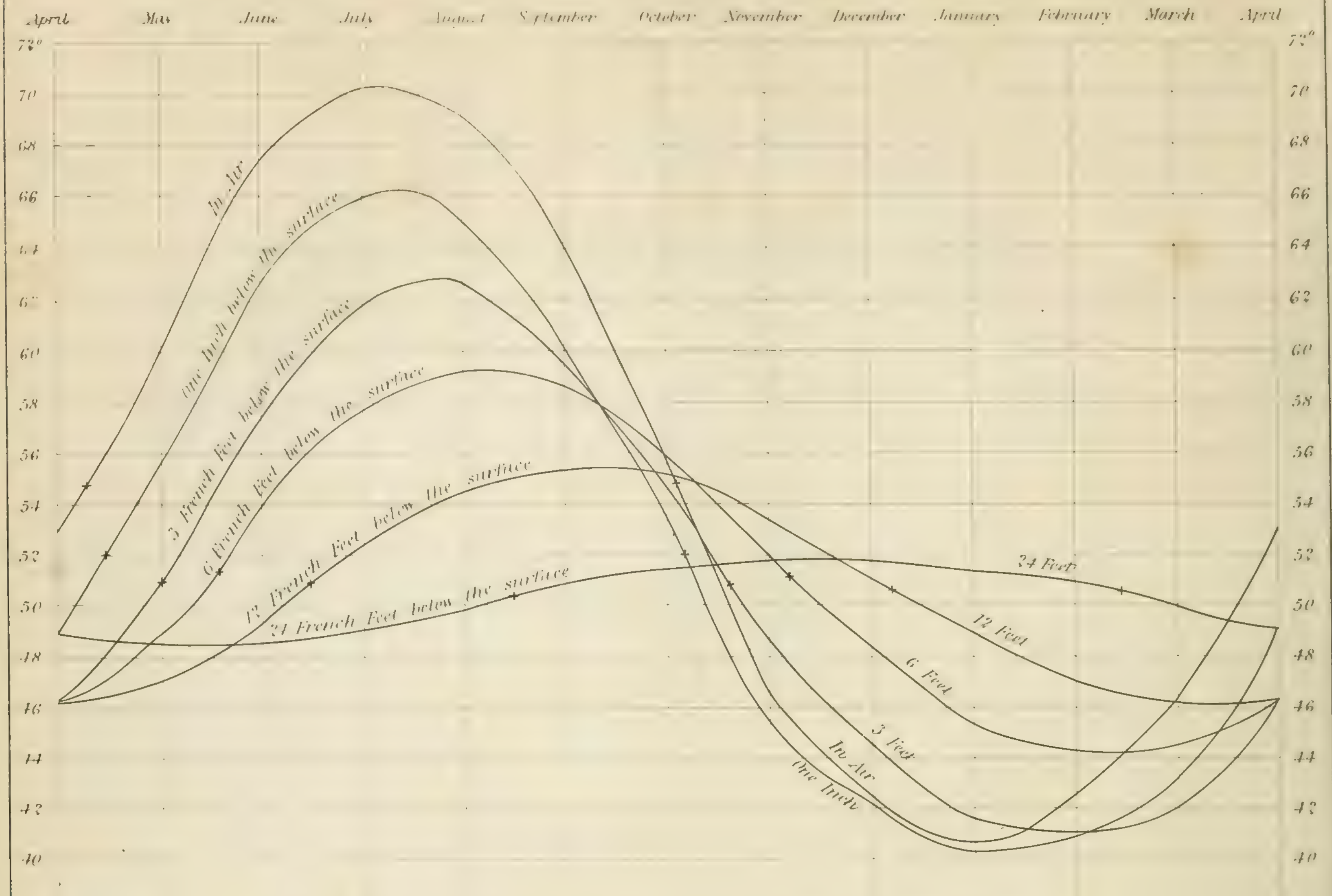
Lunar Hour.	Gottingen Mean Solar Time of the beginning of the First Lunar Day of each Lunation.											
	January. d h m 26. 1. 27	February. d h m 24. 0. 58	March. d h m 26. 1. 15	April. d h m 24. 0. 46	May. d h m 24. 1. 52	June. d h m 22. 1. 20	July. d h m 21. 1. 4	August. d h m 20. 1. 25	September. d h m 18. 0. 45	October. d h m 18. 0. 46	November. d h m 17. 1. 0	December. d h m 17. 1. 29
0	0·0148	0·0158	0·0152	0·0143	0·0127	0·0083	0·0075	0·0070	0·0071	0·0060	0·0112	0·0097
1	·0149	·0158	·0147	·0144	·0128	·0087	·0074	·0070	·0071	·0060	·0111	·0095
2	·0148	·0155	·0150	·0144	·0128	·0088	·0073	·0070	·0073	·0060	·0110	·0097
3	·0148	·0154	·0149	·0144	·0129	·0089	·0072	·0072	·0076	·0059	·0109	·0100
4	·0148	·0152	·0152	·0143	·0129	·0088	·0072	·0073	·0076	·0061	·0105	·0100
5	·0147	·0151	·0151	·0144	·0129	·0087	·0073	·0075	·0078	·0063	·0103	·0102
6	·0145	·0150	·0151	·0142	·0128	·0082	·0075	·0078	·0078	·0066	·0097	·0103
7	·0143	·0150	·0149	·0142	·0127	·0084	·0075	·0080	·0079	·0069	·0093	·0103
8	·0141	·0150	·0148	·0143	·0124	·0086	·0076	·0082	·0079	·0071	·0090	·0104
9	·0139	·0151	·0149	·0142	·0123	·0087	·0077	·0084	·0079	·0073	·0090	·0105
10	·0138	·0150	·0149	·0143	·0125	·0091	·0079	·0087	·0078	·0075	·0088	·0105
11	·0137	·0151	·0149	·0143	·0125	·0090	·0081	·0085	·0074	·0077	·0088	·0107
12	·0135	·0151	·0149	·0144	·0124	·0091	·0086	·0085	·0073	·0078	·0087	·0108
13	·0134	·0153	·0149	·0146	·0124	·0087	·0088	·0084	·0073	·0079	·0088	·0108
14	·0133	·0154	·0149	·0148	·0121	·0087	·0089	·0084	·0071	·0081	·0088	·0108
15	·0133	·0154	·0148	·0148	·0121	·0088	·0088	·0082	·0070	·0082	·0091	·0107
16	·0135	·0153	·0147	·0148	·0120	·0090	·0083	·0080	·0069	·0079	·0093	·0106
17	·0137	·0154	·0146	·0147	·0120	·0091	·0082	·0079	·0070	·0075	·0094	·0104
18	·0139	·0155	·0146	·0148	·0122	·0090	·0079	·0078	·0073	·0070	·0098	·0104
19	·0141	·0155	·0144	·0148	·0122	·0085	·0077	·0074	·0071	·0065	·0100	·0103
20	·0144	·0155	·0143	·0147	·0123	·0083	·0076	·0072	·0072	·0063	·0102	·0104
21	·0148	·0154	·0143	·0147	·0124	·0080	·0078	·0070	·0073	·0060	·0104	·0104
22	·0149	·0154	·0143	·0145	·0124	·0080	·0078	·0068	·0071	·0059	·0105	·0102
23	·0151	·0155	·0143	·0145	·0125	·0081	·0077	·0068	·0073	·0058	·0108	·0101

TABLE XXV.—MEAN, through the RANGE of LUNATIONS, of the LUNATION-MEAN DETERMINATIONS of the LUNO-DIURNAL INEQUALITY of VERTICAL FORCE; exhibited separately for the different Years; with the Mean for all the Years.

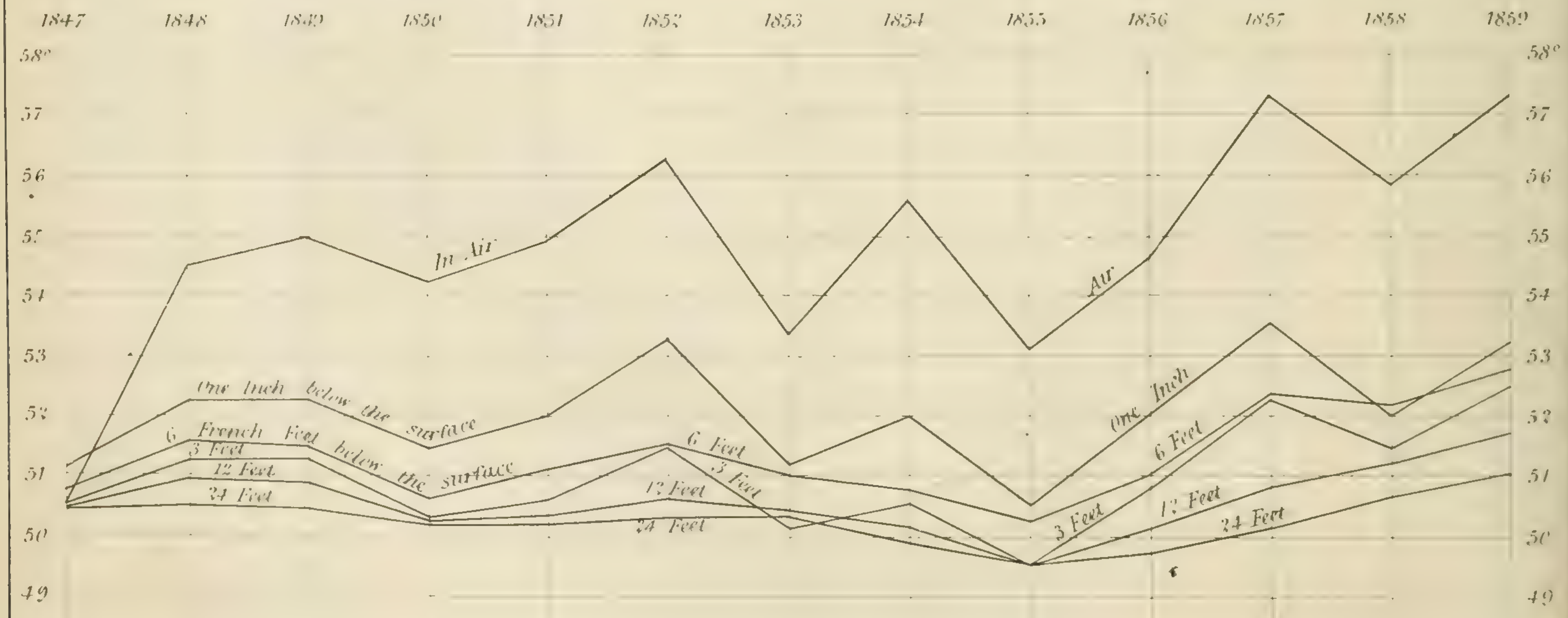
Lunar Hour.	Mean Luno-Diurnal Inequality in each Year.									Mean, 1849 to 1857.	Equivalent in Terms of Horizontal Force.
	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.		
0	+0·00011	−0·00002	+0·00008	−0·00008	+0·00024	−0·00001	−0·00013	−0·00012	−0·00002	+0·000006	+0·000015
1	+ 15	+ 3	+ 2	− 6	+ 14	+ 2	− 12	− 12	− 4	+ 2	+ 5
2	+ 7	+ 1	+ 3	0	+ 14	− 3	− 16	− 8	− 3	− 6	− 15
3	+ 12	− 3	− 3	− 1	− 3	− 5	− 14	− 3	+ 2	− 20	− 51
4	+ 11	0	− 12	+ 1	− 6	− 3	− 12	+ 2	0	− 19	− 49
5	+ 5	+ 3	− 13	− 3	− 10	− 14	− 12	+ 2	+ 3	− 43	− 111
6	+ 16	+ 3	− 17	0	− 4	− 12	− 8	+ 2	− 3	− 26	− 67
7	+ 15	− 2	− 15	− 3	− 7	− 18	− 3	− 3	− 4	− 44	− 113
8	+ 15	+ 1	− 15	+ 2	− 7	− 14	+ 6	− 2	− 4	− 20	− 51
9	+ 3	0	− 15	+ 3	− 4	− 11	0	− 2	0	− 29	− 75
10	0	0	− 10	+ 7	− 9	− 6	− 2	+ 1	+ 7	− 13	− 33
11	− 8	+ 3	− 8	+ 5	− 16	+ 1	− 4	+ 2	+ 7	− 20	− 51
12	− 23	+ 7	− 7	+ 8	− 16	+ 3	− 4	+ 4	+ 10	− 20	− 51
13	− 20	+ 3	− 7	+ 8	− 6	+ 3	− 4	+ 8	+ 12	− 3	− 8
14	− 23	+ 6	− 2	+ 8	− 1	+ 8	+ 1	+ 4	+ 12	+ 14	+ 36
15	− 19	0	+ 5	+ 9	+ 4	+ 7	+ 6	+ 7	+ 11	+ 33	+ 85
16	− 12	0	+ 6	− 7	+ 8	+ 6	+ 13	+ 10	+ 3	+ 30	+ 77
17	− 9	− 3	+ 9	− 3	+ 14	+ 9	+ 13	+ 10	0	+ 44	+ 113
18	− 9	− 5	+ 8	− 3	+ 12	+ 12	+ 2	+ 14	+ 2	+ 37	+ 95
19	− 12	− 9	+ 8	− 3	+ 6	+ 16	− 6	+ 3	− 12	− 10	− 26
20	− 3	− 8	+ 10	− 5	+ 2	+ 14	− 3	+ 3	− 12	− 2	− 5
21	+ 6	− 7	+ 8	− 9	+ 4	+ 12	+ 5	− 2	− 13	+ 3	+ 8
22	+ 10	− 3	+ 11	− 3	+ 12	+ 8	0	− 14	− 18	+ 3	+ 8
23	+ 19	+ 3	+ 12	− 4	+ 17	+ 9	0	− 10	− 9	+ 41	+ 105

MONTHLY TEMPERATURES OF THE DEEP-SUNK THERMOMETERS, FROM THE MEAN OF OBSERVATIONS EXTENDING FROM 1847 TO 1859

(The crosses indicate the points corresponding to the mean annual temperature for each thermometer.)



MEAN ANNUAL TEMPERATURES OF THE DEEP SUNK THERMOMETERS.



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RESULTS

OF THE

MAGNETICAL AND METEOROLOGICAL

OBSERVATIONS

MADE AT

THE ROYAL OBSERVATORY, GREENWICH,

1860.

(EXTRACTED FROM THE GREENWICH OBSERVATIONS, 1860.)

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

MAGNETICAL AND METEOROLOGICAL OBSERVATIONS.

1860.

ROYAL OBSERVATORY, GREENWICH.

INDICATIONS

OF

MAGNETOMETERS.

1860.

The establishment of Assistants in the Magnetical and Meteorological Department of the Royal Observatory consisted during the year 1860, of Mr. James Glaisher, the Superintendant, and Mr. Thomas Downs; with three supernumerary assistants, to aid in the observations and reductions.

For description of the three Magnetometers, the method of observing by the Telescope, and the method of reducing the observations, the reader is referred to the *Greenwich Magnetical and Meteorological Observations* for 1847, Introduction, page i to xlii; and to corresponding parts of the preceding volumes.

During the year 1860, Telescope-Observations of the Magnetometers have usually been made four times every day, except on Sundays, on which days two or three observations only have been taken; but, though these observations are employed in forming the base-lines on the Photographic sheets, their immediate results are not necessarily given in the following pages.

Observations were made of the Horizontal Circle of the Theodolite by which the DECLINATION MAGNET is observed, corresponding to the Astronomical Meridian, on February 3, 16, 25, March 14, May 2, June 7, August 4, 7, September 1, October 27, November 15, and December 5.

Observations were made of the Collimation of the DECLINATION MAGNETOMETER; of the Torsion-force of its Suspension skein; and of the Collimation of the Theodolite-Telescope; on 1859, December 29, and 1860, January 12, 23, and 24.

Observations of the Angle of Torsion of the HORIZONTAL FORCE MAGNETOMETER were made on 1860, January 2, 3, and 4. The angle determined was 43°. 15′. Observations were made for the times of vibration and readings of the scale for different readings of the torsion-circle on the same days, and the general conclusion was, that the scale-readings and the times of vibration, had nearly the same value when the reading of the torsion-circle was 144°. 0′ (marked end West); and 230°. 30′ (marked end East). The reading adopted for the adjustment of the torsion-circle throughout the year (marked end West) was 143°. 0′.

The number used for the variation of horizontal force for a disturbance through one division of the scale, in parts of the whole horizontal force, is 0·0020524.

The correction for temperature is $0{\cdot}0000809 \times (t-32) + 0{\cdot}000000762\ (t-32)^2$, where t is the temperature in degrees of Fahrenheit's scale. This formula, which represents the mean of the results deduced from temperature-experiments made with each end of the magnet alternately near the measuring apparatus, is preferable to that given in the volumes before 1850, which were based on experiments made in one position of the magnet. The correction for temperature is *not* applied to any of the results of observations.

Observations of the times of vibration of the VERTICAL FORCE MAGNETOMETER have usually been made three or four times a week. The adopted time of vibration for the year was $15^{s}{\cdot}72$.

Observations for the time of vibration in a horizontal plane were made in 1859, April 19, when the time of vibration was found to be $24^{s}{\cdot}258$ from 700 vibrations.

The value of the disturbing force, in terms of the whole vertical force, for one division of the scale, is inferred to be 0·001498 for the year: and this number has been used throughout the year.

The correction for temperature is $0·0001345 \times (t-32) + 0·00000254 + (t-32)^2$. This formula, like that for the Horizontal Force Magnetometer, is deduced from temperature-experiments made in both positions of the magnet. The correction is *not* applied to any of the results of observation.

The methods adopted in the use of the Photographic Apparatus; in the determination of zeros, both for time and for magnetic indications; and in the translation into numbers of the indications given by the Photographic Traces for arbitrary times; are in every respect the same as those described in the Addendum to the Introduction to the *Greenwich Magnetical and Meteorological Observations*, 1847, pages lxxxiii to xc. The only important alterations that have been made are, that (as mentioned at the end of that Introduction) coal-gas charged with the vapour of coal-naphtha is used to give the light required for forming the Photographic Trace; and that the cylinders carrying the Photographic paper (both that which receives the traces of the Declination Magnet and the Horizontal Force Magnet, and that which receives the traces of the Vertical Force Magnet and the Barometer), are now made to revolve in 24^h. It may be mentioned also that, commencing with the year 1858, the observations are referred to Greenwich Mean Time instead of Göttingen Mean Time as heretofore.

It is proper to add, that, in measuring the ordinates of the Vertical Force Curves, the same difficulty that is mentioned in preceding volumes has still occasionally been felt. Apparently without cause, the curve is dislocated; one part being raised above or depressed below the contiguous part, in the direction of the ordinate, usually by small quantities. In all cases the displacement is accompanied by vibration, the original position being at the extremity of the arc of vibration, and the new position being at its center; showing that there has been no want of delicacy in the movement, and that the change is precisely the same as would be caused by the quiet application of a small weight upon one end of the magnet.

In general the ordinates of the Photographic Curves have been measured so frequently, including all maxima and minima, that a reader, laying down a succession of points by means of the given times as abscissæ and the given measures of force as ordinates, connecting these points by straight lines, and attending to the symbols as explained in the foot notes, will very nearly produce the original curves.

At the times when the Vertical Force Trace is dislocated, two ordinates have been taken for the same abscissa; these are connected by a brace, and the difference of the numbers indicates the amount of the disturbance.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
				Jan. 1		Jan. 1		
h m	° ′	h m		h m		h m	°	°
					(†)	7. 0	58·0	58·0
				0. 47	·02400	21. 0	52·6	53·1
				6. 11	·02207			
				8. 7	·02220			
				9. 46	·02156			
				13. 34	·02169			
				16. 13	·02344			
				20. 40	·02481			
				22. 30	·02628			
				23. 48	·02625			
					(†)			
				Jan. 2		Jan. 2		
					(†)	1. 0		54·3
				0. 57	·02620	3. 0		55·8
				2. 11	·02531	9. 0		55·7
				5. 36	{·02137 ·02240	21. 0		53·9
				8. 30	·02206			
				16. 13	·02343			
				18. 52	·02462			
					(†)			
				21. 0	·02486*			
				Jan. 3		Jan. 3		
				1. 0	·02515*	1. 0		54·8
				3. 0	·02486*	3. 0		55·6
				9. 0	·02156	9. 0		57·0
				21. 0	·02171	21. 0		53·6
				Jan. 4		Jan. 4		
				0. 0	·02418	1. 0		53·0
				1. 52	·02406	3. 0		54·0
				4. 0	·02296	9. 0		52·2
				4. 9	·02360	21. 0		47·0
				4. 42	·02320			
				5. 10	·02365			
				7. 45	·02410			
				11. 45	·02591			
				20. 0	·03120			
				23. 59	·03159			
		Jan. 5		Jan. 5		Jan. 5		
			(†)	0. 0	·03159	1. 0		48·8
		1. 8	·0868	1. 28	{·03120	3. 0	50·0	51·0
			***		·03200	9. 0	50·0	51·0
		2. 45	·0871	6. 58	·02682	21. 0	46·7	47·9
		3. 6	·0874	13. 35	·02693			
		3. 18	·0871	17. 7	·02770			
		4. 26	·0871	22. 25	·02968			
		6. 3	·0883	23. 59	·02960			
		7. 17	·0884					
		7. 40	·0881					
		7. 52	·0875					
		8. 30	·0882					
		8. 44	·0882					
		9. 9	·0894					
		9. 32	·0895					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Jan. 5						
h m	° ′ ″	h m		h m		h m	°	°
		9. 48	·0883					
		10. 2	·0881					
		10. 25	·0885					
		10. 41	·0880					
		10. 56	·0882					
		11. 20	·0877					
		12. 13	·0887					
		12. 45	·0882					
		13. 0	·0882					
		13. 13	·0885					
		14. 18	·0886					
		15. 37	·0894					
		15. 57	·0899					
		16. 43	·0899					
		17. 4	·0907					
		17. 21	·0900					
		17. 56	·0895					
			***					
		20. 8	·0894					
			***					
		22. 2	·0880					
			***					
		22. 35	·0872					
		23. 27	·0877					
		23. 45	·0874					
		23. 59	·0876					
		Jan. 6		Jan. 6		Jan. 6		
		0. 0	·0876	0. 0	·02960	1. 0	49·5	50·7
		1. 56	·0870	7. 0	·02486	3. 0	51·0	52·0
		2. 25	·0877	11. 21	·02530	9. 0	49·0	50·7
			***	12. 47	·02600	21. 0	41·0	44·0
		3. 26	·0877	21. 10	·03228			
			***	23. 14	·03200			
		3. 57	·0868		(†)			
		4. 16	·0868					
		4. 40	·0873					
		4. 48	·0872					
		5. 7	·0864					
		5. 39	·0872					
		5. 45	·0869					
		6. 15	·0873					
		6. 36	·0870					
		7. 5	·0874					
			***					
		7. 36	·0863					
			***					
		8. 27	·0865					
		9. 3	·0871					
		9. 20	·0868					
			***					
		10. 3	·0873					
		10. 24	·0871					
		11. 11	·0888					
		11. 26	·0873					
		11. 32	·0875					
		11. 36	·0871					
		11. 51	·0881					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

The Horizontal Force Magnet was undergoing adjustments to January 5, and the Declination Magnet to January 12.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Jan. 6						
h m	° ′ ″	h m		h m		h m	°	°
		12. 2	·0876					
		12. 30	·0896					
		12. 56	·0891					
		13. 14	·0895					
			***					
		14. 17	·0896					
		14. 46	·0893					
		15. 45	·0896					
		16. 5	·0894					
		16. 43	·0898					
		17. 20	·0896					
		18. 6	·0899					
		19. 30	·0899					
		20. 18	·0897					
		21. 35	·0880					
		21. 50	·0882					
		22. 34	·0878					
			***					
		23. 59	·0879					
		Jan. 7		Jan. 7		Jan. 7		
		0. 0	·0879		(†)	1. 0	44·0	45·4
		0. 32	·0884	0. 57	·02770	3. 0	47·0	48·0
		1. 45	·0883	2. 4	·02750	9. 0	46·6	48·0
			***	9. 12:	·02186	22. 45	46·0	47·6
		2. 36	·0876	16. 47	·02451			
		3. 3	·0876	23. 59	·02769			
		3. 29	·0887					
		3. 33	·0885					
		3. 47	·0886					
		4. 0	·0884					
		6. 54	·0897					
		17. 38	·0911					
		20. 20	·0908					
		21. 3	·0904					
		21. 48	·0895					
		22. 15	·0894					
		23. 2	·0883					
		23. 59	·0884					
		Jan. 8		Jan. 8		Jan. 8		
		0. 0	·0884	0. 0	·02769	7. 0	47·0	48·5
		2. 16	·0895	7. 10	·02405	21. 0	42·0	45·0
		3. 15	·0894	13. 11:	·02230			
		6. 36	·0900	21. 44	·02503			
		8. 33	·0900	23. 59	·02600			
		9. 49	·0898					
		12. 50	·0901					
		15. 21	·0907					
		19. 15	·0913					
		20. 25	·0912					
		21. 10	·0909					
		21. 43	·0899					
		23. 32	·0893					
		23. 59	·0895					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Jan. 9		Jan. 9		Jan. 9		
h m	° ′ ″	h m		h m		h m	°	°
		0. 0	·0895	0. 0	·02600	1. 0	44·[illegible]	46·0
		0. 36	·0892	2. 10	·02538	3. 0	46·[illegible]	47·[illegible]
		0. 56	·0886	6. 28	·02190	9. 0	48·[illegible]	48·[illegible]
		1. 32	·0891		·02223	21. 0	42·[illegible]	44·7
		1. 53	·0892	13. 38:	·02262			
		2. 20	·0890	21. 42	·02628			
		2. 37	·0891	23. 59	·02687			
		3. 42	·0885					
			***					
		7. 30	·0848					
			***					
		11. 17	·0897					
		11. 39	·0904					
		12. 8	·0897					
		12. 25	·0897					
		12. 39	·0901					
		13. 12	·0900					
		16. 52	·0912					
		20. 30	·0909					
		21. 41	·0896					
			***					
		23. 59	·0893					
		Jan. 10		Jan. 10		Jan. 10		
		0. 0	·0893	0. 0	·02687	1. 0	45·0	47·0
		1. 45	·0890	1. 27	·02637	3. 0	48·0	49·[illegible]
		3. 30	·0883	5. 0	·02216	9. 0	48·2	50·[illegible]
			***	11. 53	·02290	21. 0	44·0	46·0
		4. 56	·0891	17. 37	·02448			
		6. 17	·0896	22. 6	·02664			
		6. 53	·0892	23. 59	·02685			
		8. 45	·0897					
		10. 0	·0896					
		11. 46	·0903					
			***					
		14. 12	·0906					
		14. 18	·0915					
		14. 36	·0912					
			***					
		16. 33	·0921					
		16. 54	·0919					
		17. 38	·0941					
			***					
		18. 50	·0919					
		19. 0	·0920					
		19. 11	·0915					
		19. 22	·0916					
		19. 33	·0914					
		19. 56	·0918					
			***					
		20. 33	·0914					
		20. 45	·0907					
			***					
		22. 3	·0899					
			***					
		23. 20	·0884					
		23. 46	·0887					
			(†)					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Jan. 11		Jan. 11		Jan. 11		
h m	° ′ ″	h m		h m		h m	°	°
			(†)	0. 0	·02685	0. 0	48·8	49·5
		0. 8	·0883	1. 57	·02560	1. 0	48·8	49·5
		0. 22	·0890	4. 37	{ ·02300	3. 0	50·0	51·0
		0. 35	·0887		·02362	6. 0	52·0	52·0
		1. 0	·0882*	6. 35	·02443	9. 0	50·8	51·0
			(†)	8. 10	·02384	12. 0	49·7	50·5
		3. 0	·0879*	11. 51	·02396	18. 0	47·5	48·2
		3. 43	·0869	12. 38	·02340	21. 0	47·0	48·3
			***	15. 6	·02463			
		4. 15	·0865	16. 10	·02437			
			***	16. 36	·02470			
		4. 39	·0854	16. 55	·02457			
		5. 0	·0856	21. 11	·02590			
		5. 9	·0853	22. 30	·02681			
		5. 26	·0856	23. 59	·02672			
		5. 33	·0852					
		5. 39	·0852					
		5. 45	·0846					
		5. 55	·0850					
		6. 3	·0844					
		6. 20	·0855					
		6. 38	·0854					
		6. 46	·0859					
		7. 1	·0855					
			***					
		7. 20	·0862					
		7. 23	·0858					
		7. 32	·0866					
		7. 35	·0864					
		7. 40	·0867					
		7. 50	·0858					
		8. 0	·0860					
		8. 4	·0856					
			***					
		8. 25	·0862					
			***					
		9. 10	·0846					
		9. 32	·0852					
		9. 42	·0847					
		10. 0	·0856					
		10. 7	·0854					
		10. 39	·0858					
		10. 54	·0873					
		11. 12	·0856					
		11. 21	·0852					
		11. 33	·0854					
		11. 55	·0873					
		12. 3	·0862					
		12. 30	·0886					
		12. 41	·0882					
		12. 45	·0884					
		12. 56	·0878					
		13. 18	·0878					
		13. 30	·0877					
		13. 40	·0866					
		14. 2	·0872					
			***					
		14. 28	·0873					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Jan. 11						
h m	° ′ ″	h m		h m		h m	°	
		15. 15	·0889					
		15. 27	·0886					
		15. 45	·0889					
		16. 4	·0898					
		16. 18	·0893					
		16. 45	·0913					
		17. 0	·0907					
		17. 18	·0910					
		18. 17	·0890					
		18. 46	·0897					
			***					
		22. 12	·0865					
		22. 33	·0868					
		23. 4	·0863					
		23. 45	·0853					
		23. 55	·0855					
		23. 59	·0853					
Jan. 12		Jan. 12		Jan. 12		Jan. 12		
2. 45	21. 15. 0	0. 0	·0853	0. 0	·02672	1. 0	51·0	51·7
4. 24	13. 35		***	3. 42	{ ·02307	3. 0	53·0	54·0
6. 11	14. 50	1. 2	·0859		·02304	9. 0	51·5	52·0
8. 39	13. 45		***	9. 51	·02443	21. 0	43·3	45·3
10. 11	14. 50	1. 47	·0867	20. 56	·03251			
10. 40	12. 35	2. 6	·0864	23. 59	·03240			
11. 12	16. 10	7. 10	·0882					
11. 38	15. 0	10. 21	·0885					
13. 7	16. 0	10. 49	·0891					
13. 29	15. 25	11. 17	·0887					
13. 54	16. 40	14. 45	·0896					
14. 18	15. 55	15. 19	·0901					
14. 36	17. 0	20. 43	·0905					
15. 49	14. 20	21. 37	·0894					
17. 22	15. 20		***					
17. 43	14. 30	22. 47	·0885					
18. 4	15. 0		(†)					
18. 23	14. 30	23. 42	·0880					
20. 0	15. 40	23. 59	·0881					
20. 40	17. 0							
22. 25	17. 20							
22. 36	18. 30							
23. 30	17. 30							
23. 44	19. 25							
23. 59	18. 50							
Jan. 13		Jan. 13		Jan. 13		Jan. 13		
0. 0	21. 18. 50	0. 0	·0881	0. 0	·03240	1. 0	47·0	48·0
4. 32	14. 10	0. 32	·0880	2. 0	·03162	3. 0	49·0	49·7
5. 49	14. 0	0. 45	·0886	7. 24:	·02591	9. 0	50·3	51·0
	***	1. 3	·0881	13. 11	·02493	21. 0	47·0	48·0
7. 28	16. 15	2. 58	·0880	22. 24	·02760			
7. 56	14. 0	3. 7	·0883	23. 59	·02748			
8. 9	15. 0	3. 36	·0881					
8. 36	14. 0	5. 32	·0885					
9. 29	15. 50	9. 41	·0889					
10. 29	15. 0	13. 27	·0894					
	***	19. 55	·0903					
17. 15	16. 20	20. 50	·09[illegible]1					
	***		***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

The Declination Magnet was under adjustment till January 12.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Jan. 13		Jan. 13						
h m	° ′ ″	h m		h m		h m	°	°
20. 45	21. 15. 0	22. 18	·0883					
21. 6	13. 30		***					
23. 59	18. 15	23. 59	·0880					
Jan. 14		Jan. 14		Jan. 14		Jan. 14		
0. 0	21. 18. 15	0. 0	·0880	0. 0	·02748	1. 0	50·0	51·0
1. 0	21. 30*	1. 33	·0878	3. 29	·02559	3. 0	52·5	52·7
3. 0	17. 18*	2. 4	·0874	6. 19	·02216	9. 6	53·0	53·2
9. 6	11. 27*	3. 17	·0881	12. 22	·02230	23. 0	49·0	50·0
23. 0	17. 4*	3. 34	·0877	23. 59	·02760			
		4. 18	·0880					
		5. 19	·0885					
		7. 34	·0882					
		10. 55	·0888					
		11. 25	·0897					
		11. 38	·0893					
		12. 27	·0891					
		18. 46	·0900					
		22. 25	·0887					
		23. 3	·0887					
		23. 59	·0871					
Jan. 15		Jan. 15		Jan. 15		Jan. 15		
9. 0	21. 13. 48*	0. 0	·0871	0. 0	·02760	9. 0	52·0	53·0
21. 0	18. 16*	0. 25	·0876	3. 10	·02872	21. 0	49·0	50·0
		0. 48	·0872	8. 59	·02765			
		1. 40	·0875	11. 43	·02656			
		2. 45	·0872	15. 9	·02613			
		5. 12	·0891	19. 54	·02842			
			***	21. 37	·02996			
		9. 6	·0897	23. 59	·03009			
		9. 18	·0914					
		9. 33	·0908					
		10. 17	·0896					
			***					
		11. 49	·0898					
		12. 7	·0903					
			***					
		12. 38	·0897					
		12. 46	·0903					
			***					
		13. 20	·0903					
		13. 32	·0897					
		13. 36	·0899					
		13. 50	·0886					
		14. 17	·0904					
		14. 42	·0893					
		15. 10	·0887					
		15. 32	·0892					
		15. 47	·0905					
			***					
		16. 46	·0894					
			***					
		19. 15	·0906					
			***					
		20. 13	·0906					
		20. 35	·0899					
		21. 9	·0899					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
		Jan. 15						
h m	° ′ ″	h m		h m		h m	°	°
		22. 38	·0884					
			***					
		23. 59	·0884					
Jan. 16		Jan. 16		Jan. 16		Jan. 16		
	(†)	0. 0	·0884	0. 0	·03009	1. 0	50·0	51·0
0. 54	21. 22. 10		***	1. 59	·03000	3. 0	53·0	53·0
1. 37	21. 30	0. 27	·0881	5. 51	·02509	9. 0	[illegible]	51·5
	***	1. 30	·0870	8. 48	·02338	21. 0	[illegible]	45·2
2. 13	23. 55	2. 7	·0875	12. 22	·02512			
2. 22	21. 0	2. 25	·0864	20. 39	[illegible]			
2. 30	22. 10	2. 36	·0868	22. 16	·03240			
2. 42	21. 30	2. 54	·0859	23. 59	·03069			
2. 57	25. 10	3. 3	·0862					
3. 51	17. 20	3. 17	·0851					
4. 43	20. 40	3. 46	·0868					
4. 50	20. 10	4. 28	·0874					
5. 44	26. 0	4. 45	·0871					
6. 5	24. 30	5. 6	·0875					
6. 19	19. 15		***					
6. 31	22. 50	5. 37	·0874					
6. 56	16. 0	5. 45	·0865					
7. 13	20. 10	5. 51	·0866					
7. 34	17. 30	6. 4	·0856					
7. 43	19. 20	6. 20	·0863					
8. 0	9. 30	6. 40	·0853					
8. 11	14. 0		***					
8. 30	10. 0	7. 6	·0874					
8. 44	15. 0	7. 19	·0869					
9. 9	9. 0	7. 33	·0871					
9. 47	13. 0	7. 45	·0866					
	(†)	7. 57	·0895					
12. 0	14. 30	8. 15	·0881					
14. 15	18. 10	8. 25	·0895					
14. 36	17. 20	8. 46	·0867					
16. 22	17. 5	9. 21	·0884					
17. 14	18. 0	9. 38	·0878					
18. 45	15. 10	9. 47	·0881					
19. 59	14. 55	10. 3	·0877					
20. 11	16. 0		***					
20. 30	14. 0	13. 12	·0891					
20. 54	15. 30	13. 27	·0889					
21. 15	13. 15	13. 52	·0896					
23. 44	19. 45	14. 3	·0891					
23. 54	21. 10	14. 47	·0894					
23. 59	21. 0	15. 2	·0900					
		15. 13	·0896					
			***					
		17. 36	·0907					
		17. 43	·0903					
		20. 10	·0905					
			***					
		23. 59	·0875					
Jan. 17		Jan. 17		Jan. 17		Jan. 17		
0. 0	21. 21. 0	0. 0	·0875	0. 0	·03069	1. 0	[illegible]	47·8
0. 15	20. 40		***	1. 57	[illegible]	3. 0	[illegible]	[illegible]
0. 25	21. 35	4. 15	·0880	8. 48	·02622	9. 0	[illegible]	[illegible]
			***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Jan. 17	
h m	° ′ ″
0. 54	21. 21. 20
1. 12	23. 0
1. 56	20. 40
2. 28	20. 0
2. 40	20. 20
3. 15	18. 40
4. 14	17. 15
4. 39	17. 30
5. 28	19. 15
6. 43	19. 20
10. 4	17. 35
13. 15	19. 40
13. 45	19. 0
15. 47	20. 50
17. 3	20. 30
18. 0	21. 0
18. 45	19. 15
20. 38	17. 0
21. 10	13. 40 ***
22. 39	18. 30
22. 44	18. 0
23. 6	19. 10
23. 59	19. 55
Jan. 18	
0. 0	21. 19. 55
0. 25	20. 30
0. 40	17. 0
0. 52	18. 0
1. 9	17. 30
2. 0	18. 0
3. 42	14. 40
6. 14	14. 25
6. 43	16. 20
6. 55	15. 40
8. 22	16. 15
9. 10	14. 30
9. 49	16. 30
10. 45	15. 40
11. 18	16. 30
13. 0	16. 30
15. 22	14. 10
17. 11	13. 30
17. 23	13. 50
17. 39	13. 0
18. 45	13. 45 ***
20. 5	12. 35
20. 53	16. 30
21. 39	15. 0
21. 44	16. 5
22. 57	17. 30 (†)
Jan. 19	
	(†)
0. 14	21. 15. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Jan. 17	
h m	
9. 53	·0900 ***
10. 53	·0897
11. 40	·0901
13. 52	·0902 ***
19. 25	·0913
20. 43	·0910
21. 36	·0897
22. 32	·0888
22. 56	·0884 ***
23. 59	·0888
Jan. 18	
0. 0	·0888
0. 12	·0891 ***
2. 7	·0895
3. 39	·0884
5. 5	·0897 ***
12. 50	·0906
14. 39	·0907 ***
18. 4	·0913
19. 32	·0912
22. 4	·0887 ***
23. 15	·0889
23. 59	·0877
Jan. 19	
0. 0	·0877 ***

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Jan. 17	
h m	
19. 14	·03170
23. 59	·03128
Jan. 18	
0. 0	·03128
1. 23	·03098
7. 47	·02729
17. 11	·02710
21. 54	·02678
23. 59	·02616
Jan. 19	
0. 0	·02616
3. 30	·02185

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 17		
h m	°	°
21. 9	40·0	42·0
Jan. 18		
0. 0	41·2	42·2
1. 0	42·1	43·0
3. 0	44·0	45·2
6. 0	46·1	46·2
9. 0	45·6	46·1
12. 0	45·0	45·9
18. 0	44·8	46·5
21. 0	45·8	47·0
Jan. 19		
0. 0	48·0	49·0
1. 0	50·0	51·0

Greenwich Mean Solar Time.	Western Declination.
Jan. 19	
h m	° ′ ″
0. 33	21. 16. 10
0. 52	15. 0
1. 44	15. 10
1. 53	14. 30
2. 7	15. 0
3. 8	13. 30
5. 29	11. 55
6. 49	13. 30
8. 57	13. 0
9. 40	13. 45
10. 43	13. 20
11. 25	9. 40
12. 14	13. 0
12. 38	12. 30
14. 27	14. 0
15. 54	12. 20 ***
16. 30	12. 0
17. 7	13. 20
17. 15	12. 0
17. 39	12. 15
18. 7	11. 30
18. 25	12. 0
18. 43	11. 30
18. 54	12. 20
20. 51	10. 10
21. 0	12. 30
22. 26	14. 40
22. 59	17. 30
23. 15	16. 50 ***
23. 59	17. 30
Jan. 20	
0. 0	21. 17. 30
0. 28	19. 30
0. 45	17. 30
0. 51	18. 0
1. 11	16. 20
1. 41	20. 40
2. 11	18. 10
2. 23	20. 25
2. 53	20. 45
3. 28	19. 20
3. 39	20. 20
4. 15	18. 30
4. 36	20. 0
5. 12	20. 15
5. 59	15. 0
6. 45	15. 0
7. 30	18. 0
8. 13	10. 0
8. 30	22. 0
8. 51	12. 0
9. 12	13. 15
9. 37	11. 0
10. 7	13. 20
10. 44	13. 10

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Jan. 19	
h m	
2. 21	·0885 ***
6. 32	·0884
8. 43	·0896
9. 56	·0892
10. 25	·0897
10. 48	·0897
11. 15	·0904
12. 2	·0899
12. 20	·0903
12. 33	·0896
12. 47	·0906
13. 7	·0902 ***
15. 2	·0904
16. 19	·0908 ***
16. 45	·0907
17. 0	·0910
17. 7	·0906
17. 39	·0912 ***
20. 55	·0907 ***
22. 21	·0894 ***
23. 59	·0887
Jan. 20	
0. 0	·0887
0. 37	·0885
0. 46	·0890
1. 5	·0886
1. 25	·0893 ***
1. 57	·0885
2. 13	·0890
2. 19	·0885
2. 38	·0885
2. 58	·0880 ***
3. 56	·0885
4. 4	·0882
4. 50	·0889
5. 17	·0882 ***
6. 32	·0894 ***
7. 10	·0895 ***
7. 25	·0886 ***
7. 55	·0886

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Jan. 19	
h m	
11. 25	·02258
22. 30	·03016
23. 59	·03050
Jan. 20	
0. 0	·03050
2. 57	·02908
5. 28	·02551
7. 51	·02350
8. 17	·02357
8. 40	·02300
13. 11	·02231
14. 39	·02253
17. 43	·02488
22. 43	·03038
23. 59	·03077

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 19		
h m	°	°
3. 0	52·5	52·9
9. 0	51·8	52·0
21. 0	46·0	47·0
Jan. 20		
1. 0	48·9	48·8
3. 0	51·0	51·3
9. 0	52·6	52·6
21. 0	45·0	46·3

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Jan. 20		Jan. 20						
h m	° ′ ″	h m		h m		h m	°	°
11. 11	21. 12. 0	8. 18	·0923					
11. 28	9. 0	8. 36	·0876					
12. 12	4. 55	9. 0	·0891					
12. 22	5. 30	9. 12	·0884					
12. 30	4. 30		***					
12. 45	4. 45	10. 3	·0895					
	(†)	10. 47	·0892					
13. 57	14. 20	11. 1	·0897					
14. 13	12. 30		***					
14. 28	14. 30	11. 42	·0890					
14. 57	9. 0		***					
15. 14	11. 0	12. 12	·0893					
15. 29	9. 30		***					
15. 41	12. 20	12. 45	·0883					
17. 24	16. 30	13. 6	·0886					
17. 50	15. 50	13. 37	·0886					
18. 9	17. 20	13. 48	·0882					
18. 25	16. 20	14. 15	·0903					
18. 42	16. 45	14. 26	·0904					
19. 0	16. 0		***					
19. 30	16. 0	14. 50	·0896					
21. 9	13. 30		***					
	***	16. 44	·0899					
23. 27	16. 30		***					
23. 44	18. 30	18. 53	·0909					
23. 59	17. 35		***					
		20. 35	·0906					
			***					
		22. 25	·0888					
			***					
		23. 32	·0887					
		23. 45	·0892					
			***					
		23. 59	·0887					
Jan. 21		Jan. 21		Jan. 21		Jan. 21		
0. 0	21. 17. 35	0. 0	·0887	0. 0	·03077	1. 0	47·0	47·7
1. 13	17. 30	0. 15	·0885	2. 29:	·03158	3. 0	48·0	48·0
2. 21	21. 35		***	5. 45	·02882	9. 0	48·0	48·0
2. 50:	18. 0	0. 38	·0889	7. 46	·02850	22. 50	44·7	
3. 15	20. 50	0. 47	·0885	10. 27	·02890			
4. 13	18. 30	2. 16	·0892	13. 31	·03080			
4. 49	21. 0	2. 37	·0885	14. 6	·03065			
5. 18	20. 45	2. 56	·0887	17. 36	·03172			
5. 39	19. 0	3. 20	·0897	23. 25	·03150 ·03105			
6. 0	19. 30		***					
6. 22	17. 35	4. 15	·0892	23. 59	·03115			
7. 0	21. 30		***					
	(†)	5. 18	·0896					
9. 0	17. 42*	5. 37	·0902					
11. 45	14. 50	6. 0	·0898					
12. 19	12. 0		***					
12. 30	13. 10	6. 45	·0905					
12. 49	9. 0	7. 2	·0899					
13. 13	14. 40	7. 20	·0907					
13. 40	7. 30	7. 33	·0896					
13. 51	7. 0	7. 44	·0904					
14. 13	8. 30	7. 47	·0898					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Jan. 21		Jan. 21						
h m	° ′ ″	h m						°
14. 30	21. 7. 30	8. 0	·0908					
14. 53	10. 20		(†)					
15. 6	10. 15	8. 10	·0880					
15. 25	13. 2	8. 20	·0885					
	***		(†)					
16. 45	14. 0	8. 36	[illegible]					
17. 12	12. 40	8. 45	·0887					
17. 19	13. 45	8. 57	·0882					
17. 43	13. 30	9. 22	·0898					
17. 57	14. 0	9. 45	·0902					
18 51	22. 0		***					
19. 13	17. 45	11. 27	·0901					
19. 52	13. 50	11. 41	·0905					
20. 29	17. 55	11. 48	·0901					
21. 1	16. 15	12. 3	·0906					
22. 12	22. 40	12. 25	·0900					
22. 26	19. 0	12. 32	·0903					
22. 44	18. 0	12. 44	·0901					
	(†)	12. 50	·0907					
23. 45	22. 10	13. 2	·0906					
23. 59	20. 0	13. 10	·0920					
		13. 17	·0925					
		13. 42	·0908					
			***					
		14. 50	·0913					
		14. 56	·0910					
		15. 15	·0909					
		15. 33	·0902					
			***					
		17. 5	·0904					
		17. 14	·0909					
		17. 43	·0907					
		17. 46	·0909					
		18. 6	·0897					
			***					
		19. 1	·0905					
		20. 18	·0903					
		20. 56	·0888					
		21. 34	·0886					
		22. 10	·0890					
		23. 39	·0891					
		23. 59	·0893					
Jan. 22		Jan. 22		Jan. 22		Jan. 22		
0. 0	21. 20. 0	0. 0	·0893	0. 0	·03115	6. 38	[illegible]	[illegible]
0. 8	21. 0	0. 37	·0887	1. 51	[illegible]	21. 0	41·0	42·0
0. 31	17. 35	1. 30	·0898	7. 43	[illegible]			
0. 48	20. 20	3. 7	·0899	12. 30	·02900			
1. 29	18. 0	4. 46	·0891	20. 4	·03200			
1. 44	18. 30	5. 47	·0903	23. 59	·03208			
2. 0	17. 50	7. 18	·0908					
2. 22	17. 20	8. 3	·0905					
2. 37	18. 10	8. 17	·0910					
2. 53	17. 0	8. 36	·0908					
4. 22	16. 55	8. 48	·0912					
4. 40	15. 40	9. 3	·0908					
4. 51	15. 35	9. 15	·0911					
5. 49:	10. 30	10. 20	·0904					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 22		Jan. 22						
h m	° ′ ″	h m		h m		h m	°	°
6. 42	21. 15. 50	10. 43	·0914					
8. 5	14. 30	11. 0	·0900					
8. 18	15. 5	11. 55	·0911					
9. 8	11. 30	12. 22	·0899					
10. 7	14. 0		***					
10. 45	12. 35	13. 40	·0900					
11. 6	12. 40	13. 51	·0904					
11. 30	17. 25	14. 15	·0904					
	(†)	14. 27	·0909					
17. 58	15. 15		***					
19. 43	15. 25	18. 4	·0913					
20. 55	13. 0	20. 36	·0904					
21. 42	13. 30	22. 3	·0886					
22. 10	17. 40		***					
22. 41	16. 20	23. 38	·0886					
23. 59	19. 10	23. 59	·0883					
Jan. 23		Jan. 23		Jan. 23		Jan. 23		
0. 0	21. 19. 10	0. 0	·0883	0. 0	·03208	1. 0	45 ·0	45 ·3
0. 13	19. 45		***	2. 0:	·03088	3. 0	48 ·5	48 ·4
0. 53	19. 5	1. 2	·0878	7. 37:	·02296	9. 0	49 ·0	48 ·7
1. 16	21. 0		***	13. 7	·02467	21. 0	47 ·0	47 ·3
1. 28	19. 30	4. 45	·0897	20. 10	·02392			
4. 30	15. 45	5. 0	·0891	23. 59	·02493			
5. 32	14. 15	5. 21	·0894					
6. 42	15. 35		***					
7. 40	15. 40	11. 23	·0901					
	(†)	11. 44	·0907					
9. 0	15. 41*	12. 7	·0899					
10. 58	11. 30	12. 23	·0899					
11. 29	8. 40	12. 38	·0896					
11. 51	10. 0	13. 39	·0904					
11. 59	10. 0	14. 20	·0900					
12. 16	12. 20		***					
13. 44	12. 45	20. 25	·0903					
14. 36	15. 20	22. 15	·0878					
16. 44	15. 20		***					
17. 39	13. 45	22. 46	·0874					
17. 56	14. 45	23. 59	·0881					
18. 20	14. 0							
19. 29	14. 55							
21. 4	13. 30							
21. 57	15. 30							
	(†)							
Jan. 24		Jan. 24		Jan. 24		Jan. 24		
	(†)	0. 0	·0881	0. 0	·02493	1. 0	49 ·0	48 ·8
2. 30	21. 17. 40	0. 26	·0885	4. 29	·02222	3. 0	51 ·0	50 ·3
2. 46	18. 10	0. 38	·0880	7. 12	·02226	9. 0	49 ·5	49 ·5
4. 56	15. 0	1. 47	·0881	7. 24	·02252	21. 0	44 ·0	45 ·0
5. 10	13. 20		***	10. 57	·02330			
5. 40	14. 30	2. 50	·0895	14. 56	·02610			
	***	3. 5	·0891	23. 59	·02948			
8. 29	13. 0	4. 2	·0889					
8. 55	9. 30	4. 50	·0893					
9. 26	13. 0	5. 15	·0887					
10. 0	12. 40		***					
10. 13	13. 30	6. 25	·0897					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 24		Jan. 24						
h m	° ′ ″	h m		h m		h m	°	°
10. 35	21. 12. 40	6. 37	·0901					
11. 40	13. 20		***					
12. 30	13. 20	7. 16	·0899					
12. 55	13. 50		***					
14. 43	13. 30	10. 52	·0904					
14. 51	14. 10	11. 7	·0902					
15. 28	12. 20		***					
16. 14	13. 15	11. 43	·0906					
18. 14	13. 5	11. 55	·0902					
19. 24	14. 0		***					
20. 58	12. 45	12. 33	·0907					
23. 45	17. 0	12. 50	·0903					
23. 59	18. 15	13. 12	·0909					
			***					
		14. 47	·0907					
		17. 56	·0914					
		20. 54	·0905					
		21. 50	·0896					
			***					
		23. 59	·0883					
Jan. 25		Jan. 25		Jan. 25		Jan. 25		
0. 0	21. 18. 15	0. 0	·0883	0. 0	·02948	0. 0	44 ·8	45 ·7
0. 16	17. 20	0. 7	·0883	1. 45	·02940	1. 0	46 ·0	47 ·0
0. 30	18. 30	0. 17	·0885	5. 52	·02687	3. 0	47 ·8	48 ·0
0. 54	19. 0	0. 39	·0881	8. 48	·02569	6. 0	48 ·2	48 ·2
1. 8	21. 30	1. 18	·0883	12. 18	·02556	9. 0	47 ·3	47 ·8
1. 16	20. 40	1. 37	·0886	21. 6	·02970	12. 0	46 ·0	47 ·0
1. 50	21. 0	2. 15	·0885	23. 37	·03168	18. 0	42 ·5	44 ·4
1. 56	21. 30		***	23. 59	·03164	21. 0	41 ·0	43 ·7
2. 8	21. 5	3. 3	·0882					
2. 55	19. 35	3. 30	·0884					
3. 19	20. 15	3. 38	·0882					
3. 54	17. 35		***					
4. 11	18. 40	4. 44	·0893					
4. 28	18. 30	4. 53	·0888					
4. 45	14. 20	5. 10	·0899					
4. 56	17. 30	5. 45	·0897					
4. 59	17. 5	5. 50	·0893					
5. 15	18. 50		***					
5. 29	19. 30	6. 21	·0897					
5. 43	17. 55	6. 40	·0886					
5. 49	18. 50		***					
5. 55	18. 30	7. 15	·0888					
6. 14	22. 10		***					
6. 44	18. 30	7. 33	·0891					
6. 49	18. 50		***					
7. 0	18. 0	7. 46	·0900					
7. 28	13. 40		***					
7. 43	15. 30	8. 15	·0899					
7. 51	16. 50	8. 26	·0903					
8. 11	13. 0	8. 37	·0893					
8. 15	13. 25	8. 48	·0894					
8. 27	11. 10	9. 37	·0903					
8. 38	12. 30		***					
8. 51	12. 45	10. 45	·0904					
11. 15	13. 0	11. 42	·0900					
12. 15	13. 15	12. 26	·0903					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 25		Jan. 25						
h m	° ′ ″	h m		h m		h m	°	°
13.31	21.10.0	12.55	·0901					
13.50	11.0	13.26:	·0904					
13.58	10.35	13.47	·0901					
14.12	12.30	14.5	·0901					
14.40	13.30	14.30	·0905					
15.27	12.35	16.33	·0907					
16.22	12.50	17.42	·0911					
16.40	11.50	19.26	·0915					
16.53	12.30	20.18	·0911					
17.16	12.30	22.32	·0885					
17.35	11.35	22.47	·0885					
18.15	13.30	23.19	·0884					
19.40	12.50	23.59	·0885					
19.53	13.30							
21.37	12.40							
23.1	15.30							
23.59	17.45							
Jan. 26		Jan. 26		Jan. 26		Jan. 26		
0.0	21.17.45	0.0	·0885	0.0	·03164	0.0	42·3	43·5
0.14	18.30	0.33	·0881	2.11	·03120	1.0	44·0	45·0
0.28	17.40	0.47	·0882	6.44:	·02756	3.0	46·0	47·0
0.52	18.0	1.6	·0880	10.0	·02811	9.0	47·5	47·3
1.17	16.30	1.57	·0883	12.0	·02820	21.0	47·5	48·7
1.41	17.35	3.46	·0891	13.42	·02752			
1.55	16.30	4.11:	·0888	22.49	·02735			
2.42	16.0	4.48	·0895	23.59	·02672			
2.54	17.0	5.36	·0892					
3.45	16.0	6.3	·0897					
4.19	14.5	6.50	·0896					
6.45	14.0	8.49	·0907					
8.35	12.30	9.18	·0899					
9.0	13.0		(†)					
10.11	4.5	9.51	·0900					
10.21	7.20	10.15	·0915					
11.40	12.10	10.43	·0901					
12.18	12.20	10.51	·0903					
13.29	10.50	11.2	·0899					
13.53	12.10		* * *					
14.40	10.0	11.43	·0904					
15.25	12.50		* * *					
16.5	12.30	13.38	·0903					
16.30	13.20	13.56	·0900					
17.0	11.30	14.33	·0903					
17.22	12.20	15.10	·0897					
17.44	12.10	15.45	·0896					
18.9	13.20	16.43	·0902					
18.30	12.40		* * *					
19.39	11.50	20.27	·0902					
20.10	13.0	20.55	·0899					
20.54	11.25	21.33	·0886					
21.21	13.0	22.0	·0885					
21.44	13.0		(†)					
21.51	8.5	23.45	·0891					
22.0	15.0	23.59	·0892					
22.14	11.0							
22.22	17.20							
22.31	16.0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 26								
h m	° ′ ″	h m		h m		h m	°	°
22.40	21.17.0							
22.51	14.30							
23.0	16.35							
23.22	14.30							
23.42	18.15							
23.51	17.40							
23.59	18.0							
Jan. 27		Jan. 27		Jan. 27		Jan. 27		
0.0	21.18.0	0.0	·0892	0.0	·02672	1.0	51·0	51·2
0.13	16.30		* * *	4.7	·02240	3.0	53·7	53·[illegible]
0.25	17.0	0.29	·0891	6.48	·02275	9.0	52·4	52·6
0.32	16.30		* * *	8.28	·02390	21.0	42·0	44·7
1.13	19.0	1.47	·0881	10.40	·02353			
1.31	23.30	2.2	·0878	14.0	·02500			
1.59	18.40	2.26	·0883	22.42	·03227			
	* * *	2.47	·0852	23.59	·03148			
3.12	19.30	3.11	·0885					
3.21	23.0	3.35	·0901					
3.31	19.40	4.3	·0885					
3.42	21.0	4.18	·0895					
4.0	18.40	5.17	·0886					
4.13	20.0	5.21	·0890					
4.27	19.0		* * *					
4.40	20.0	5.43	·0885					
4.58	18.40	5.56	·0892					
5.34	18.15	6.15	·0886					
5.52	19.20	6.42	·0895					
6.38	19.0	6.47	·0888					
6.52	20.40	7.2	·0891					
7.21	18.30	7.15	·0887					
7.39	15.0	7.20	·0881					
7.54	17.40	7.33	·0886					
8.15	7.45	7.47	·0872					
8.28	8.15	7.58	·0874					
8.57	15.55	8.7	·0871					
9.12	13.0		* * *					
9.27	10.25	8.40	·0882					
10.42	15.30	9.3	·0877					
10.56	13.30	9.32	·0889					
11.28	13.15	9.42	·0887					
11.41	14.10	10.27	·0895					
11.55	12.5	10.38	·0885					
12.15	13.10	10.52	·0885					
12.29	11.10	11.17	·0893					
12.55	16.45	11.31	·0891					
13.8	16.15	12.6	·0892					
13.39	6.20	12.11	·0888					
14.0	11.0	12.27	·0884					
14.37	7.50	12.42	[illegible]					
14.44	8.30		* * *					
15.0	7.15	13.30	·0894					
15.18	12.10	13.48	·0912					
15.50	11.30	14.33	·0898					
16.30	13.0	14.45	·0902					
16.54	12.40		* * *					
17.11	13.20	15.33	·0897					
17.24	13.0		* * *					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 27		Jan. 27						
h m	° ′ ″	h m		h m		h m	°	°
17. 48	21. 14. 20	17. 25	·0908					
18. 28	13. 35		***					
18. 54	15. 10	18. 12	·0903					
19. 24	22. 30	18. 38	·0907					
19. 39	22. 30	19. 4	·0902					
20. 12	14. 30		***					
20. 28	14. 0	20. 52	·0923					
20. 44	15. 40	21. 47	·0907					
22. 8	11. 10	23. 3	·0901					
	***	23. 17	·0896					
22. 43	14. 0	23. 47	·0903					
23. 14	13. 50	23. 59	·0891					
23. 38	20. 30							
23. 45	19. 40							
23. 59	24. 0							
Jan. 28		Jan. 28		Jan. 28		Jan. 28		
0. 0	21. 24. 0	0. 0	·0892	0. 0	·03148	1. 0	43·5	44·8
0. 14	17. 0	0. 14	·0899	3. 1	·03170	3. 0	45·0	46·0
0. 27	22. 30	0. 19	·0875	12. 13:	·02720	9. 0	45·0	45·0
0. 32	20. 0	0. 25	·0878	21. 49	·03165	21. 50	43·7	45·3
0. 39	21. 30	0. 47	·0856	23. 59	·03180			
0. 44	17. 40		***					
0. 55	22. 50	1. 13	·0847					
1. 6	20. 50	2. 10	·0876					
1. 11	21. 10	2. 21	·0876					
1. 20	17. 45	2. 37	·0883					
2. 10	15. 0	2. 46	·0872					
2. 44	17. 10		***					
2. 58	15. 40	3. 15	·0879					
3. 16	17. 0	3. 45	·0872					
4. 12	14. 40	3. 50	·0876					
	***	4. 2	·0872					
6. 12	12. 30		***					
	***	4. 43	·0874					
8. 22	12. 0	5. 6	·0884					
10. 57	11. 45	5. 17	·0878					
13. 55	13. 40	5. 32	·0880					
18. 22	13. 0	5. 45	·0877					
19. 0	16. 0	6. 6	·0882					
20. 0	13. 30	6. 27	·0882					
20. 21	14. 20	6. 45	·0880					
20. 52	13. 0	7. 18	·0884					
21. 51	13. 30	7. 30	·0897					
22. 15	15. 30	7. 35	·0889					
22. 43	14. 30	7. 43	·0892					
22. 54	15. 35		***					
23. 4	14. 40	8. 25	·0886					
23. 25	14. 30		***					
23. 59	16. 0	15. 15	·0903					
			***					
		18. 20	·0912					
		19. 7	·0907					
			***					
		20. 18	·0913					
		20. 45	·0909					
			***					
		21. 14	·0909					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Jan. 28						
h m	° ′ ″	h m		h m		h m	°	°
		21. 41	·0905					
		22. 12	·0891					
		23. 59	·0894					
Jan. 29		Jan. 29		Jan. 29		Jan. 29		
0. 0	21. 16. 0	0. 0	·0894	0. 0	·03180	8. 40	47·3	48·8
0. 12	17. 15	0. 33	·0893	1. 17	·03220	21. 0	42·0	44·0
0. 23	17. 20		***	2. 58	·03167			
0. 30	18. 30	1. 15	·0883	7. 11:	·02912			
1. 8	17. 20	1. 42	·0884	13. 57	·03227			
1. 44	21. 25	1. 52	·0880	23. 59	·03260			
1. 49	19. 0	1. 59	·0880					
2. 0	21. 0	2. 20	·0877					
2. 14	18. 25	3. 2	·0889					
3. 4	18. 55	3. 11	·0887					
3. 15	17. 50	4. 13	·0893					
3. 33	18. 20	5. 27	·0894					
3. 51	16. 30	5. 46	·0882					
5. 57	13. 0	6. 52	·0897					
6. 25	13. 40		***					
9. 38	10. 25	8. 10	·0898					
14. 10	14. 55		***					
14. 22	16. 20	9. 27	·0896					
14. 31	15. 30		***					
15. 15	15. 0	13. 50	·0905					
15. 43	16. 0		***					
16. 30	13. 0	16. 15	·0913					
17. 15	13. 50		***					
20. 7	12. 50	16. 50	·0911					
20. 28	11. 30		***					
20. 44	12. 0	18. 53	·0917					
21. 0	10. 50	20. 50	·0909					
	***	21. 51	·0891					
22. 44	14. 30		***					
23. 39	18. 35	23. 18	·0891					
23. 59	17. 10		(†)					
Jan. 30		Jan. 30		Jan. 30		Jan. 30		
0. 0	21. 17. 10		(†)	0. 0	·03260	1. 0	45·0	46·0
0. 14	19. 30	0. 12	·0881	2. 28	·03071	3. 0	48·0	49·0
0. 43	16. 55	0. 27	·0878	7. 47:	·02410	9. 0	50·0	51·0
0. 52	17. 50	0. 48	·0876	12. 0:	·02260	21. 5	45·0	47·0
1. 8	17. 20	1. 5	·0882	14. 46	·02283			
1. 24	20. 0	2. 54	·0872	22. 58	·02600			
1. 32	20. 0	3. 55	·0876	23. 59	·02606			
1. 41	18. 0	5. 45	·0888					
2. 0	17. 20	9. 24	·0891					
2. 21	18. 30	9. 45	·0896					
2. 41	16. 20	10. 3	·0892					
2. 58	15. 30		***					
3. 24	16. 30	13. 48	·0896					
5. 39	13. 10	14. 33	·0900					
10. 12	12. 0	15. 47	·0897					
13. 26	14. 0		***					
13. 41	13. 35	18. 46	·0907					
13. 59	14. 30	20. 40	·0906					
14. 44	13. 40		***					
19. 45	12. 45	22. 13	·0895					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 30		Jan. 30						
h m	° ′ ″	h m		h m		h m	°	°
21. 0	21. 10. 50	23. 10	·0882					
21. 43	10. 50	23. 37	·0881					
23. 34	16. 55	23. 47	·0877					
23. 59	17. 0	23. 59	·0879					
Jan. 31		Jan. 31		Jan. 31		Jan. 31		
0. 0	21. 17. 0	0. 0	·0879	0. 0	·02606	1. 0	48 ·0	49 ·0
0. 50	16. 20	0. 18	·0879	1. 57	·02520	3. 0	49 ·5	51 ·0
0. 55	16. 50	0. 49	·0885	4. 56	·02205	9. 0	47 ·4	59 ·5
1. 11	16. 10	1. 6	·0882	9. 44	·02210	21. 0	38 ·0	42 ·0
1. 27	17. 0	1. 48	·0879	15. 30	·02565			
1. 59	15. 15	2. 10	·0886	23. 4	·03250			
2. 12	16. 45	2. 55:	·0880	23. 59	·03223			
2. 30	15. 30	3. 43	·0887					
2. 42	15. 45	4. 38	·0886					
2. 54	15. 0	5. 11:	·0871					
3. 45	15. 45	5. 46	·0889					
4. 41	14. 0		***					
5. 8	10. 0	6. 37	·0890					
5. 12	10. 30	7. 6	·0898					
5. 31	8. 40	7. 25	·0890					
6. 0	13. 50		***					
6. 25	14. 30	8. 30	·0885					
7. 4	13. 20	9. 20	·0903					
7. 29:	14. 40		***					
8. 17	12. 0	10. 38	·0897					
8. 44	5. 40		***					
9. 6	11. 35	15. 42	·0908					
9. 15	10. 0		***					
9. 24	10. 30	16. 33	·0905					
9. 41	9. 0		***					
10. 28	11. 50	18. 18	·0919					
12. 16	13. 10		***					
12. 39	14. 5	18. 45	·0916					
13. 57	13. 10	19. 7	·0919					
14. 16	14. 0	19. 45	·0915					
14. 39	13. 35		***					
16. 3	13. 55	20. 13	·0917					
17. 0	15. 10		***					
17. 21	14. 15	22. 29	·0894					
17. 41	14. 50	22. 42	·0897					
17. 49	13. 40		***					
18. 13	13. 30	23. 21	·0897					
18. 21	14. 0	23. 34	·0893					
18. 28	13. 15	23. 42	·0898					
	***		(†)					
21. 10	11. 45							
21. 26	13. 0							
21. 39	11. 30							
22. 12	13. 0							
22. 28	12. 30							
22. 41	14. 25							
22. 49	13. 55							
22. 58	15. 0							
23. 9	17. 0							
23. 16	16. 15							
23. 21	17. 30							
23. 30	16. 10							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 31								
h m	° ′ ″	h m		h m		h m	°	°
23. 43	21. 20. 40							
23. 55	18. 0							
23. 59	18. 35							
Feb. 1		Feb. 1		Feb. 1		Feb. 1		
0. 0	21. 18. 35		(†)	0. 0	·03223	0. 0	39 ·[illegible]	41 ·[illegible]
0. 13	19. 30	0. 20	·0890	2. 0	·03218	1. 0	40 ·[illegible]	43 ·0
0. 20	19. 0	0. 38	·0891	10. 19:	·02552	3. 0	43 ·0	45 ·3
0. 28	19. 50	0. 48	·0885	16. 43	·02660	6. 0	45 ·2	47 ·0
0. 39	18. 45	1. 19	·0884	21. 4	·02799	9. 0	44 ·2	46 ·4
0. 44	19. 35		(†)	23. 25	·02968	12. 0	43 ·8	46 ·0
0. 59	18. 20	3. 0	·0895*	23. 59	·02950	18. 0	40 ·0	42 ·2
2. 19	18. 30	3. 10	·0894			21. 0	39 ·0	42 ·0
2. 27	17. 0	3. 33	·0898					
4. 18	13. 40	4. 15	·0895					
6. 14	13. 0	5. 47	·0902					
6. 30	12. 10	7. 20	·0902					
16. 48	13. 30	11. 39	·0907					
17. 40	13. 50	11. 47	·0906					
20. 57	12. 30	18. 22	·0919					
21. 15	12. 0	20. 33	·0913					
21. 43	12. 40	22. 15	·0898					
21. 49	12. 5	23. 59	·0897					
22. 30	14. 0							
22. 41	13. 50							
22. 54	15. 20							
23. 14	15. 20							
23. 27	16. 45							
23. 59	16. 25							
Feb. 2		Feb. 2		Feb. 2		Feb. 2		
0. 0	21. 16. 25	0. 0	·0897	0. 0	·02950	0. 0	41 ·3	43 ·5
1. 42	17. 45	0. 57	·0892	2. 22	·02878	1. 0	42 ·3	43 ·5
1. 56	16. 55	1. 30	·0887	6. 15:	·02590	3. 0	44 ·0	46 ·0
2. 51	16. 30		***	11. 45	·02546	9. 0	43 ·0	45 ·5
3. 8	15. 20	4. 10	·0897	22. 15	·02948	21. 0	40 ·0	42 ·0
4. 12	13. 50		***	23. 59	·02920			
4. 29	13. 0	4. 45	·0897					
5. 9	13. 15		***					
6. 10	12. 10	5. 42	·0903					
6. 44	15. 0		***					
6. 58	14. 20	6. 45	·0899					
7. 24	14. 45		***					
8. 24	13. 15	8. 15	·0906					
8. 51	11. 55	8. 42	·0903					
9. 16	12. 15	9. 18	·0913					
10. 42	11. 20		***					
12. 10	12. 20	11. 13	·0914					
12. 40	13. 30	11. 42	·0924					
14. 14	14. 30		***					
16. 19	13. 35	12. 40	·0918					
16. 44	15. 10	18. 25	·0927					
21. 7	10. 25	18. 36	·0931					
22. 43	13. 0	19. 37	·0929					
23. 59	16. 40		***					
		23. 59	·0899					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 3		Feb. 3		Feb. 3		Feb. 3		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 16. 40	0. 0	·0899	0. 0	·02920	1. 0	43·0	44·0
0. 8	16. 0	0. 48	·0897	1. 11	·02890	3. 0	45·8	47·0
0. 11	16. 40	1. 45	·0899	9. 24:	·02217	9. 0	45·4	46·7
0. 16	16. 0	2. 4	·0897	15. 45	·02423	21. 0	39·0	41·0
0. 39	18. 0	3. 47	·0899 ***	22. 48	·02940 (†)			
0. 57:	16. 30							
1. 14	18. 15	5. 10	·0906 ***					
1. 28	17. 30							
1. 57	20. 20	7. 19	·0909					
2. 11	18. 0	7. 40	·0906					
2. 52	16. 0	8. 51	·0910					
3. 7	16. 35	9. 42	·0906 ***					
3. 36	14. 40							
3. 43	15. 10	10. 0	·0907					
4. 0	14. 5	10. 15	·0903					
5. 9	13. 30	10. 42	·0907					
8. 39	13. 10	10. 55	·0913					
9. 27	12. 0	11. 13	·0914 ***					
9. 45	12. 40							
10. 14	9. 5	11. 52	·0909 ***					
10. 37	10. 45							
10. 57	15. 45	14. 57	·0917					
11. 52	9. 0	15. 6	·0922					
12. 9	10. 5	15. 17	·0920 ***					
12. 35	8. 5							
14. 13	13. 0	18. 45	·0932					
14. 53	12. 30	20. 17	·0931					
15. 0	13. 40	21. 46	·0913					
15. 46	14. 15	22. 28	·0914 ***					
16. 0	13. 30							
16. 56	14. 40	23. 12	·0906					
17. 11	14. 0	23. 59	·0909					
18. 22	13. 20							
18. 42	14. 0							
18. 56	13. 30							
19. 28	14. 10							
21 4	12. 10							
21. 56	12. 40							
22. 30	15. 0 ***							
23. 13	14. 30							
23. 59	17. 0							
Feb. 4		Feb. 4		Feb. 4		Feb. 4		
0. 0	21. 17. 0	0. 0	·0909		(†)	1. 0	42·7	43·5
0. 28	17. 30	0. 45	·0911	0. 15	·02934	3. 0	45·0	46·2
1. 9	16. 0	1. 24	·0905	1. 33	·02893	9. 0	47·5	48·0
1. 15	16. 15	2. 7	·0907	8. 48	·02160	22. 40	47·5	48·7
1. 28	15. 40	2. 21	·0912 ***	12. 40	·02218			
1. 50	17. 20			15. 13	·02203			
2. 4	16. 45	2. 52	·0912 ***	23. 59	·02245			
2. 11	18. 0							
2. 26	17. 50	3. 25	·0906					
2. 37	17. 0	4. 47	·0913					
2. 56	16. 50	4. 56	·0910					
3. 7	17. 20	7. 7	·0919					
3. 40	16. 0	8. 18	·0920					
4. 35	15. 0	11. 13	·0914					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 4		Feb. 4						
h m	° ′ ″	h m		h m		h m	°	°
5. 7	21. 13. 0	11. 52	·0911 ***					
7. 16	13. 25							
11. 7	12. 0	12. 40	·0911					
11. 15	10. 15	13. 27	·0920					
11. 59	12. 30	14. 3	·0915					
12. 42	13. 0	20. 42	·0924					
13. 16	11. 5	23. 59	·0900					
14. 10	14. 10							
14. 49	12. 55							
15. 22	13. 35							
16. 0	12. 45							
16. 42	13. 50							
18. 23	13. 15							
20. 23	11. 30							
20. 50	12. 55							
21. 10	13. 0							
21. 49	15. 0							
22. 13	15. 15 (†)							
23. 35	15. 30							
23. 43	14. 35							
23. 51	16. 0							
23. 59	15. 30							
Feb. 5		Feb. 5		Feb. 5		Feb. 5		
0. 0	21. 15. 30	0. 0	·0900	0. 0	·02245	7. 20	49·7	50·5
0. 32	15. 50	1. 37	·0903	0. 58	·02260	21. 5	45·7	47·0
0. 47	17. 45	2. 43	·0900	3. 23	·02173			
0. 54	17. 25	3. 46	·0892	4. 9	·02207			
1. 43	20. 10	5. 0	·0899	4. 27	·02311			
3. 31	17. 30	5. 16	·0903	9. 13	·02308			
4. 0	17. 50	6. 10	·0905	14. 15	·02480			
4. 45	16. 30	6. 47	·0910 ***	19. 16	·02562			
5. 30	16. 15			23. 59	·02764			
6. 50	14. 20	11. 30	·0914 ***					
15. 45	14. 25							
16. 21	15. 0	16. 8	·0917					
17. 9	14. 0	17. 7	·0922					
21. 19	11. 30	20. 20	·0919 ***					
21. 41	13. 0							
21. 57	12. 30	22. 41	·0903 ***					
22. 28	12. 50							
23. 50	16. 0	23. 59	·0907					
23. 59	16. 0							
Feb. 6		Feb. 6		Feb. 6		Feb. 6		
0. 0	21. 16. 0	0. 0	·0907	0. 0	·02764	1. 0	47·3	48·0
0. 44	16. 20	1. 5	·0904	1. 43	·02790	3. 0	48·6	48·3
0. 57	15. 25	1. 46	·0909	5. 49:	·02467	9. 0	45·4	47·2
1. 16	17. 0	2. 7	·0904	9. 37	·02470	21. 0	38·7	41·5
1. 29	16. 20	4. 14	·0903	19. 54	·03072			
1. 38	17. 15	5. 48	·0907 ***	22. 15	·03272			
1. 59	16. 10			23. 59	·03244			
2. 19	17. 0	9. 42	·0923 ***					
3. 45	13. 50							
5. 10	13. 20	19. 3	·0935					
7. 0	14. 0	20. 30	·0932					
10. 22	13. 0	21. 52	·0919					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 6		Feb. 6						
h m	° ′ ″	h m		h m		h m	°	°
16. 52	21. 14. 0	23. 7	·0927					
18. 51	12. 55	23. 59	·0919					
20. 39	13. 5							
21. 7	12. 20							
21. 56	11. 45							
23. 22	13. 45							
	(†)							
Feb. 7		Feb. 7		Feb. 7		Feb. 7		
	(†)	0. 0	·0919	0. 0	·03244	1. 0	42·5	43·0
1. 26	21. 16. 30	0. 52	·0922	1. 37	·03157	3. 0	45·0	46·0
2. 30	17. 0	2. 43	·0914	6. 13:	·02680	9. 0	47·0	48·0
2. 51	16. 10	4. 32	·0916	12. 24	·02433	21. 0	46·0	47·0
3. 0	16. 25	6. 17	·0927	20. 0	·02412			
5. 7	13. 20	11. 15	·0929	22. 48	·02465			
11. 21	12. 0	11. 48	·0927	23. 59	·02435			
11. 45	12. 15	12. 2	·0936					
11. 57	13. 0	12. 21	·0938					
12. 12	12. 45	12. 55	·0931					
12. 29	10. 0		***					
14. 52	14. 10	14. 29	·0927					
15. 15	13. 40	17. 34	·0928					
16. 52	14. 30	18. 40	·0935					
17. 12	13. 40	19. 15	·0932					
17. 51	14. 30	19. 52	·0933					
18. 39	12. 40	22. 10	·0909					
19. 22	13. 30	22. 30	·0910					
20. 59	11. 30	22. 55	·0900					
23. 59	16. 35	23. 59	·0896					
Feb. 8		Feb. 8		Feb. 8		Feb. 8		
0. 0	21. 16. 35	0. 0	·0896	0. 0	·02435	0. 0	48·7	49·0
0. 43	18. 0	0. 6	·0895	3. 15	·02233	1. 0	49·8	49·7
1. 12	17. 15	0. 18	·0899	4. 39	·02277	3. 0	52·0	52·7
2. 6	17. 40	0. 43	·0899	12. 45	·02320	6. 0	52·0	52·3
4. 9	14. 40	1. 27	·0894	16. 47	·02470	9. 0	52·3	52·5
11. 54	13. 0	4. 48	·0904	22. 7	·02833	12. 0	51·0	52·0
16. 25	14. 15		***	23. 59	·02944	18. 0	46·8	48·8
16. 43	15. 20	14. 27	·0919			21. 0	45·0	47·0
17. 26	14. 0	17. 15	·0929					
17. 43	14. 40	17. 28	·0926					
18. 30	13. 15	18. 40:	·0935					
21. 39	9. 10	21. 50	·0913					
22. 15	9. 30	22. 41	·0908					
23. 45	12. 20	23. 42	·0900					
23. 59	14. 0	23. 59	·0902					
Feb. 9		Feb. 9		Feb. 9		Feb. 9		
0. 0	21. 14. 0	0. 0	·0902	0. 0	·02944	0. 0	46·0	47·0
0. 8	13. 55	1. 36	·0901	1. 35	·02980	1. 0	46·5	47·3
0. 45	16. 20	2. 2	·0908	7. 35:	·02777	3. 0	48·0	48·8
1. 10	15. 45	2. 38	·0908	15. 7	·03260	9. 0	44·7	46·4
1. 27	17. 0		***	23. 59	·03113	21. 0	34·0	38·0
1. 32	16. 15	3. 17	·0902					
1. 45	18. 50	3. 46	·0909					
3. 15	17. 0	5. 7	·0909					
3. 23	17. 45	5. 45	·0906					
3. 54	16. 0		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 9		Feb. 9						
h m	° ′ ″	h m		h m		h m	°	°
4. 12	21. 15. 10	7. 40	·0917					
4. 45	15. 0		***					
5. 4	15. 45	8. 23	·0915					
7. 26	14. 10		***					
7. 55	14. 30	9. 27	·0921					
8. 15	13. 30	10. 11	·0918					
9. 53	11. 55	10. 32	·0910					
10. 31	0. 50	10. 46	·0913					
11. 16	10. 10	11. 33	·0911					
12. 19	13. 20		***					
12. 52	13. 5	12. 20	·0921					
13. 13	15. 0	13. 6	·0924					
13. 30	14. 0	13. 21	·0931					
15. 18	15. 20	14. 8	·0927					
18. 28	13. 45	16. 42	·0937					
18. 40	13. 20	18. 15	·0946					
18. 51	13. 35	19. 3	·0944					
20. 18	11. 0	19. 52	·0947					
21. 5	10. 15	20. 42	·0943					
22. 15	11. 45	21. 46	·0927					
23. 51	18. 0		***					
23. 59	16. 55	22. 15	·0931					
			***					
		23. 37	·0922					
		23. 59	·0929					
Feb. 10		Feb. 10		Feb. 10		Feb. 10		
0. 0	21. 16. 55	0. 0	·0929	0. 0	·03113	1. 0	38·0	40·3
0. 21	16. 50	0. 15	·0920	1. 43	·03107	3. 0	41·0	43·0
0. 37	18. 0		***	7. 13:	·02470	9. 0	41·0	43·0
1. 29	18. 30	0. 43	·0921	12. 26	·02500	21. 0	33·7	37·2
1. 42	17. 20		***	20. 57	·03138			
1. 53	18. 5	3. 15	·0908	23. 59	·03060			
2. 15	18. 0	4. 13	·0918					
2. 51	16. 40	4. 24	·0916					
3. 27	16. 40	4. 38	·0922					
5. 10	14. 10	4. 45	·0919					
5. 35	14. 15	5. 20	·0925					
6. 29	12. 20	5. 49	·0921					
7. 0	14. 0		***					
7. 43	6. 15	7. 7	·0923					
8. 11	8. 50	7. 15	·0914					
8. 21	8. 40	7. 22	·0913					
8. 49	11. 30	7. 36	·0909					
9. 15	8. 0	7. 53	·0920					
9. 30	8. 50	8. 12	·0911					
9. 51	6. 20	8. 33	·0915					
10. 24	0. 50	8. 56	·0907					
11. 12	7. 30		***					
11. 24	5. 50	10. 2	·0913					
11. 32	6. 0	10. 20	·0921					
11. 43	4. 50	10. 24	·0917					
12. 13	9. 0	10. 32	·0919					
12. 47	3. 35	10. 47	·0912					
13. 40	11. 25		***					
13. 54	12. 10	11. 33	·0925					
14. 12	13. 50	11. 52	·0921					
14. 28	12. 45	12. 7	·0921					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 10		Feb. 10						
h m	° ′ ″	h m		h m		h m	°	°
14. 40	21. 13. 0	12. 50	·0929					
14. 58	11. 50	13. 2	·0924					
15. 24	12. 10		***					
15. 42	13. 15	13. 43	·0920					
16. 37	12. 20	14. 15	·0931					
17. 1	13. 20	14. 26	·0927					
17. 14	13. 0	14. 45	·0930					
17. 45	13. 30	15. 20	·0929					
	***	16. 48	·0936					
21. 21	11. 30	17. 5	·0935					
22. 15	13. 0		***					
22. 43	15. 10	18. 29	·0944					
22. 51	15. 0		***					
23. 59	17. 45	19. 45	·0943					
			***					
		20. 43	·0947					
		22. 2	·0936					
			***					
		23. 0	·0917					
			***					
		23. 59	·0911					
Feb. 11		Feb. 11		Feb. 11		Feb. 11		
0. 0	21. 17. 45	0. 0	·0911	0. 0	·03060	1. 0	38·0	39·0
0. 14	16. 50	6. 45	·0927	1. 50	·02920	3. 0	41·0	41·7
0. 52	18. 0	7. 3	·0934	12. 5;	·02215	9. 0	42·7	43·8
1. 2	17. 10	7. 26	·0931	23. 59	·02693	22. 48	36·0	38·0
1. 21	18. 30		***					
2. 10	18. 55	9. 23	·0934					
3. 44	15. 45	10. 2	·0931					
5. 41	13. 40	12. 15	·0931					
11. 28	13. 0		***					
11. 57	12. 15	14. 52	·0937					
12. 28	13. 10	16. 7	·0936					
14. 24	14. 35	18. 10	·0945					
14. 46	13. 20	19. 27	·0947					
16. 10	13. 45	20. 26	·0942					
16. 30	14. 55	21. 13	·0925					
16. 45	14. 10	21. 44	·0923					
16. 58	15. 20	21. 55	·0925					
18. 3	13. 20		***					
19. 51	12. 30	23. 59	·0911					
20. 1	13. 20							
20. 13	12. 20							
20. 21	13. 0							
20. 40	12. 0							
21. 37	18. 50							
21. 55	16. 15							
22. 22	18. 20							
23. 19	17. 30							
23. 51	18. 30							
23. 59	18. 15							
Feb. 12		Feb. 12		Feb. 12		Feb. 12		
0. 0	21. 18. 15	0. 0	·0911	0. 0	·02693	9. 0	41·0	42·5
0. 29	17. 20	0. 40	·0917	1. 56	·02750	21. 0	35·0	37·0
0. 45	20. 10	1. 7	·0909	12. 38;	·02280			
1. 3	18. 50	2. 10	·0912	22. 50	·02780			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 12		Feb. 12		Feb. 12				
h m	° ′ ″	h m		h m		h m	°	°
2. 15	21. 22. 40	2. 21	·0909	23. 59	·02785			
2. 30	20. 35		***					
2. 44	22. 5	3. 22	·0920					
3. 23	22. 55	3. 36	·0909					
3. 30	24. 15	3. 48	·0909					
3. 46	22. 15	4. 13	·0925					
3. 57	20. 0	4. 28	·0912					
4. 10	19. 0	4. 36	·0918					
4. 21	24. 30		***					
4. 30	22. 10	4. 57	·0915					
4. 41	22. 20	5. 31	·0898					
4. 49	21. 0	5. 40	·0892					
5. 10	25. 5	5. 46	·0897					
5. 24	25. 50	6. 0	·0896					
5. 45	21. 30	6. 9	·0906					
5. 53	22. 10	6. 33	·0891					
6. 15	21. 0	6. 47	·0896					
6. 45	16. 0		***					
7. 6	13. 50	7. 10	·0893					
7. 11	14. 0	7. 22	·0900					
7. 25	12. 50	7. 50	·0903					
7. 39	13. 40	8. 10	·0897					
8. 0	13. 30	8. 26	·0904					
8. 29	11. 20	8. 48	·0905					
8. 41	11. 20	8. 56	·0902					
9. 6	1. 55	9. 10	·0887					
9. 21	2. 0	9. 28	·0887					
10. 4	9. 30	10. 2	·0903					
10. 18	8. 0	10. 25	·0905					
	***	11. 10	·0915					
11. 52	13. 30		***					
12. 9	12. 50	12. 52	·0919					
12. 51	14. 0	16. 10	·0921					
14. 14	14. 0	17. 11	·0927					
15. 7	14. 55	19. 15	·0925					
18. 54	14. 0	20. 38	·0919					
19. 13	13. 15	22. 2	·0894					
20. 40	12. 30	22. 15	·0897					
20. 53	11. 20	22. 50	·0890					
21. 50	14. 30	23. 26	·0893					
21. 55	16. 0		***					
22. 1	14. 45	23. 59	·0883					
22. 21	17. 30							
	***							
23. 0	18. 20							
23. 26	21. 0							
23. 38	20. 20							
23. 59	22. 15							
Feb. 13		Feb. 13		Feb. 13		Feb. 13		
0. 0	21. 22. 15	0. 0	·0883	0. 0	·02785	1. 0	40·0	41·3
0. 17	23. 20	0. 17	·0878	1. 20	·02670	3. 0	43·0	44·0
1. 3	20. 5		(†)	6. 45	·02049	9. 0	39·0	41·5
1. 28	21. 0	1. 0	·0886*	9. 30	·02108	21. 0	31·3	35·7
2. 6	18. 0	3. 0	·0894*	21. 7	·02873			
2. 23	20. 20	3. 16	·0891	22. 53	·02967			
3. 5	20. 10	4. 8	·0898	23. 59	·02929			
3. 41	18. 0	4. 27	·0895					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 13		Feb. 13						
h m	° ′ ″	h m		h m		h m	°	°
3. 51	21. 18. 30	5. 51	·0911					
4. 40	13. 40		***					
6. 58	15. 0	6. 52	·0913					
16. 37	13. 40	7. 11	·0907					
21. 29	10. 20		***					
23. 51	17. 30	13. 47	·0917					
		18. 3	·0927					
		19. 39	·0925					
		23. 0	·0899					
		23. 30	·0897					
			(†)					
Feb. 14		Feb. 14		Feb. 14		Feb. 14		
	(†)		(†)	0. 0	·02929	1. 0	36·0	38·0
0. 28	21. 16. 35	0. 46	·0899	1. 43	·02833	3. 0	39·4	41·5
1. 58	16. 45	3. 0:	·0894	5. 24	·02240	9. 0	41·0	43·0
4. 12	13. 30	4. 34	·0898	7. 15	{·02050	21. 0	35·0	38·0
8. 52	12. 30	4. 56	·0891		·02089			
15. 7	14. 35	10. 2	·0908	12. 14	·02110			
15. 37	13. 20	13. 51	·0916	20. 21	·02438			
15. 54	13. 20	15. 33	·0924	23. 59	·02623			
16. 20	12. 25	16. 0	·0920					
17. 45	12. 20	16. 42	·0924					
17. 58	12. 55	18. 20	·0925					
18. 23	15. 0	18. 50	·0929					
18. 51	13. 40	19. 21	·0923					
19. 15	16. 0	19. 43	·0924					
20. 10	12. 30	21. 40	·0913					
21. 54	10. 40	23. 17	·0891					
23. 59	15. 45	23. 59	·0887					
Feb. 15		Feb. 15		Feb. 15		Feb. 15		
0. 0	21. 15. 45	0. 0	·0887	0. 0	·02623	0. 0	37·3	39·7
0. 55	15. 55	0. 36	·0888	1. 36	·02617	1. 0	39·0	41·0
1. 37	15. 20		(†)	5. 45	{·02130	3. 0	42·5	44·0
2. 12	15. 45	1. 0	·0890*		·02162	6. 0	44·0	45·5
2. 23	17. 30	3. 0	·0896*	8. 37	·02192	9. 0	43·5	45·2
2. 37	17. 5	3. 27	·0893	13. 40	·02140	12. 0	43·0	45·1
2. 45	17. 50	4. 10	·0894	21. 36	·02309	18. 0	41·0	44·0
4. 9	16. 0	4. 48	·0899	22. 58	·02360	21. 0	41·2	43·8
4. 25	17. 0	5. 32	·0892	23. 59	·02349			
5. 2	15. 20	5. 49	·0892					
5. 21	15. 40	6. 18	·0901					
5. 55	9. 0	6. 42	·0885					
6. 21	11. 25	6. 50	·0887					
6. 46	16. 40	7. 7	·0883					
6. 56	15. 30	7. 33	·0889					
7. 9	17. 0	7. 55	·0889					
7. 51	15. 5	8. 6	·0886					
7. 58	16. 0	8. 33	·0892					
8. 29	13. 40	9. 17	·0895					
9. 15	14. 0	9. 38	·0907					
9. 40	5. 5	10. 0	·0885					
9. 51	10. 30	11. 9	·0898					
10. 14	9. 30	11. 58	·0899					
10. 49	13. 0	12. 15	·0897					
12. 12	14. 0	12. 46	·0910					
12. 48	12. 50	14. 7	·0901					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 15		Feb. 15						
h m	° ′ ″	h m		h m		h m	°	°
13. 21	21. 15. 5	14. 43	·0907					
13. 59	11. 50	16. 26	·0911					
14. 30	11. 20	16. 47	·0910					
15. 12	13. 0	17. 17	·0918					
15. 19	15. 15	17. 30	·0920					
15. 39	13. 5		(†)					
15. 51	11. 30	21. 0	·0902*					
16. 21	8. 40							
16. 56	10. 10							
17. 21	13. 45							
17. 28	13. 30							
17. 50	14. 15							
18. 37	14. 0							
18. 53	12. 30							
19. 24	12. 0							
19. 37	12. 20							
19. 49	11. 20							
	***							
20. 19	12. 40							
20. 38	11. 5							
	***							
21. 50	13. 20							
23. 59	19. 0							
Feb. 16		Feb. 16		Feb. 16		Feb. 16		
0. 0	21. 19. 0		(†)	0. 0	·02349	0. 0	43·6	45·1
3. 26	15. 50	1. 0	·0890*	0. 57	·02293	1. 0	44·5	46·5
4. 11	14. 20	3. 0	·0902*	2. 42	·02156	3. 0	47·0	48·2
	***	5. 50	·0904	3. 39	·02205	9. 0	44·0	46·2
9. 15	14. 15		***	9. 24	·02306	21. 0	38·7	41·2
10. 41	12. 50	7. 1	·0911	20. 58	·02954			
	***	10. 20	·0926	22. 52	·03043			
13. 9	12. 20	11. 52	·0925	23. 59	·03053			
13. 21	14. 0	12. 16	·0930					
13. 31	12. 50		***					
13. 46	14. 20	14. 0	·0926					
14. 9	11. 30	14. 40	·0919					
14. 29	12. 0	15. 15	·0922					
15. 13	8. 20	15. 43	·0915					
15. 43	8. 0	16. 6	·0918					
16. 12	11. 0	17. 25	·0911					
16. 36	8. 15	19. 20	·0922					
16. 43	8. 50		***					
17. 0	8. 0	21. 20	·0914					
17. 43	9. 10	22. 2	·0913					
17. 57	8. 30	22. 17	·0909					
	***	22. 49	·0914					
18. 58	12. 0	23. 0	·0906					
19. 15	13. 30	23. 7	·0909					
19. 55	13. 30	23. 25	·0904					
20. 10	12. 20	23. 47	·0916					
	***	23. 56	·0904					
21. 39	13. 0	23. 59	·0906					
22. 1	15. 30							
22. 15	15. 15							
23. 10	19. 10							
23. 26	17. 40							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 16								
h m	° ′ ″	h m		h m		h m	°	°
23. 45	21. 25. 30							
23. 59	24. 30							
Feb. 17		Feb. 17		Feb. 17		Feb. 17		
0. 0	21. 24. 30	0. 0	·0906	0. 0	·03053	1. 0	42 ·5	43 ·8
0. 15	23. 0	0. 16	·0903	2. 22	·02928	3. 0	45 ·7	47 ·0
0. 36	26. 20	0. 24	·0906	7. 11	·02310	9. 0	47 ·2	48 ·0
0. 43	25. 50		(†)	8. 27	·02320	21. 8	42 ·8	44 ·2
1. 10	27. 50	1. 0	·0896*	12. 19	·02237			
1. 51	24. 20	3. 0	·0896*	23. 0	·02681			
1. 59	29. 20	5. 15	·0866		(†)			
2. 12	27. 5	5. 29	·0875					
2. 25	27. 20		***					
2. 51	17. 20	6. 10	·0886					
3. 12	20. 50	6. 22	·0884					
3. 23	18. 45	6. 31	·0887					
3. 44	21. 20		***					
4. 4	18. 30	7. 40	·0885					
4. 19	18. 0	7. 56	·0890					
4. 30	19. 10	8. 13	·0888					
4. 39	18. 35	9. 15	·0899					
4. 51	21. 20		***					
5. 0	18. 20	10. 47	·0899					
5. 10	19. 45	11. 2	·0908					
5. 30	12. 40	11. 13	·0902					
6. 0	15. 20	11. 28	·0920					
6. 41	13. 30	11. 42	·0909					
7. 27	13. 45	11. 51	·0921					
7. 52	11. 20		***					
7. 57	11. 40	12. 38	·0908					
8. 19	8. 45	12. 55	·0912					
8. 47	9. 30		***					
9. 54	12. 45	14. 10	·0901					
10. 54	12. 10		***					
11. 5	13. 0	15. 14	·0896					
11. 14	12. 0		***					
11. 45	15. 20	16. 35	·0901					
11. 55	14. 30	16. 50	·0898					
12. 7	15. 20	17. 3	·0900					
12. 44	8. 0		***					
12. 55	10. 0	18. 12	·0906					
13. 13	9. 30	19. 4	·0903					
13. 30	8. 0	19. 54	·0907					
13. 45	10. 10	20. 29	·0903					
14. 13	9. 30	20. 45	·0909					
14. 31	12. 20	20. 57	·0901					
15. 6	12. 50	21. 10	·0907					
15. 31	8. 15	21. 55	·0895					
16. 10	13. 20	22. 37	·0894					
16. 27	10. 40	22. 50	·0888					
16. 45	10. 15		***					
17. 3	12. 40	23. 43	·0888					
18. 4	12. 0		(†)					
18. 17	13. 20							
18. 44	12. 15							
	***							
20. 48	11. 45							
20. 57	10. 20							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 17								
h m	° ′ ″	h m		h m		h m	°	°
21. 12	21. 11. 45							
22. 0	10. 20							
	***							
23. 59	15. 30							
Feb. 18		Feb. 18		Feb. 18		Feb. 18		
0. 0	21. 15. 30		(†)		(†)	1. 0	45 ·0	
0. 14	19. 30	1. 0	·0888*	3. 30	·02590	3. 0	47 ·5	48 ·2
0. 36	16. 30	3. 0	·0876*	5. 12	·02368	9. 0	47 ·0	48 ·0
0. 54	18. 40	3. 56	·0893	6. 22	·02372	22. 30	42 ·0	43 ·2
1. 10	17. 15	4. 27	·0894	6. 45	·02430			
1. 25	18. 30	4. 58	·0891	10. 55	·02407			
1. 50	20. 40	5. 20	·0895	14. 29	·02465			
1. 59	19. 0	5. 36	·0893	15. 37	·02411			
2. 26	22. 30		***	20. 24	·02793			
2. 43	21. 30	6. 37	·0903	23. 59	·02805			
3. 8	14. 20	6. 42	·0894					
3. 21	13. 0	6. 58	·0903					
4. 24	16. 30	7. 22	·0917					
5. 14	16. 15	7. 37	·0908					
5. 43	13. 20	7. 46	·0907					
5. 54	13. 55	8. 0	·0909					
6. 10	13. 10	8. 17	·0905					
6. 19	14. 0	8. 43	·0907					
6. 36	13. 20	10. 15	·0899					
6. 51	9. 20		(†)					
6. 57	11. 15	11. 5	·0896					
7. 14	6. 50	11. 22	·0899					
7. 30	11. 15	11. 36	·0910					
7. 54	10. 20	11. 47	·0916					
8. 11	12. 30	12. 5	·0907					
9. 39	10. 30	12. 30	·0911					
10. 0	6. 0	12. 47	·0904					
10. 13	9. 5		***					
10. 21	1. 10	14. 0	·0901					
10. 45	8. 15	14. 12	·0904					
10. 54	6. 20	14. 25	·0903					
11. 7	6. 45	14. 44	·0912					
11. 19	6. 0	14. 54	·0909					
11. 29	4. 0		(†)					
11. 42	6. 30	15. 47	·0913					
12. 0	7. 0	16. 16	·0903					
12. 12	8. 10	16. 28	·0905					
12. 40	5. 30	16. 33	·0902					
13. 0	8. 30	17. 13	·0913					
13. 26	10. 20	17. 45	·0909					
14. 10	9. 50	18. 41	·0921					
14. 19	11. 5	19. 3	·0915					
14. 44	9. 0	19. 51	·0911					
14. 55	10. 55	20. 8	·0918					
15. 31	4. 50	21. 2	·0900					
16. 13	13. 30		(†)					
16. 54	11. 10	21. 47	·0916*					
17. 20	13. 50	22. 32	·0914					
	***		(†)					
17. 54	12. 30							
18. 9	13. 55							
18. 20	13. 5							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

February 18. On this day the adjustments, &c. of the Vertical Force Magnet were examined.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 18								
h m	° ′ ″	h m		h m		h m	°	°
19. 15	21. 14. 30							
19. 39	12. 30							
19. 53	14. 50							
20. 0	14. 0							
20. 31	15. 10							
20. 54	13. 20							
21. 44	14. 30							
21. 54	13. 35							
22. 15	15. 30							
	(†)							
Feb. 19		Feb. 19		Feb. 19		Feb. 19		
6. 57	21. 7. 46*	6. 57	·0909*	0. 0	·02805	6. 57	44·2	45·0
21. 0	9. 57*	21. 0	·0913*	3. 39	·02853	21. 0	35·0	38·0
				9. 18	·02680			
				11. 9	·02684			
				13. 51	·02805			
				23. 59	·02710			
Feb. 20		Feb. 20		Feb. 20		Feb. 20		
1. 0	21. 11. 41*	1. 0	·0900*	0. 0	·02710	1. 0	39·0	40·4
3. 0	17. 26*	3. 0	·0884*	2. 30	·02649	3. 0	41·5	42·2
9. 0	14. 18*	9. 0	·0912*	6. 52	·02164	9. 0	42·3	44·0
21. 0	11. 54*	21. 0	·0908*	12. 43	·02040	21. 0	39·0	41·7
				23. 59	·02257			
Feb. 21		Feb. 21		Feb. 21		Feb. 21		
1. 0	21. 29. 16*	1. 0	·0912*	0. 0	·02257	1. 0	42·0	43·0
3. 0	27. 32*	3. 0	·0904*	0. 55	·02300	3. 0	44·0	45·3
9. 0	10. 23*	9. 0	·0853*	3. 56	·02155	9. 0	45·0	46·5
21. 0	15. 50*	21. 0	·0862*	4. 42	·02220	21. 0	40·8	43·0
				5. 0	·02328			
				5. 10	·02280			
				7. 10	·02225			
				9. 12	·02264			
				10. 25	·02207			
				10. 37	·02122			
				11. 7	·01977			
				11. 12	·02008			
				11. 19	·01965			
				11. 30	·02074			
				11. 45	·02040			
				12. 15	·02130			
				13. 12	·02152			
				13. 30	·02110			
				15. 54	·02118			
				16. 28	·02187			
				23. 59	·02648			
Feb. 22		Feb. 22		Feb. 22		Feb. 22		
1. 0	21. 25. 58*	1. 0	·0861*	0. 0	·02648	0. 0	42·3	43·8
3. 0	25. 11*	3. 0	·0882*	1. 37	·02650	1. 0	43·6	45·0
9. 0	7. 21*	9. 0	·0896*	5. 15	·02292	3. 0	46·7	47·8
21. 0	9. 39*	21. 0	·0903*	9. 37	·02200	6. 0	48·2	49·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
				Feb. 22		Feb. 22		
h m	° ′ ″	h m		h m		h m	°	°
				13. 51	·02303	9. 0	47·1	47·5
				20. 24	·02904	12. 0	44·5	46·0
				23. 59	·02888	18. 0	39·0	41·4
						21. 0	37·0	40·0
Feb. 23		Feb. 23		Feb. 23		Feb. 23		
1. 0	21. 21. 11*	1. 0	·0892*	0. 0	·02888	0. 0	41·0	42·0
3. 0	18. 16*	3. 0	·0889*	1. 53	·02760	1. 0	42·1	43·0
9. 0	8. 19*	9. 0	·0904*	6. 5	·02092	3. 0	46·0	47·0
21. 0	10. 44*	21. 0	·0923*	10. 21	·02163	9. 0	45·0	45·7
				18. 39	·02872	21. 0	34·0	37·2
				23. 59	·02791			
Feb. 24		Feb. 24		Feb. 24		Feb. 24		
1. 0	21. 19. 52*	1. 0	·0895*	0. 0	·02791	1. 0	40·0	41·2
3. 0	18. 50*	3. 0	·0906*	1. 35	·02693	3. 0	44·7	46·0
9. 0	5. 33*	9. 0	·0903*	5. 27	·02006	9. 0	45·0	45·8
21. 0	9. 54*	21. 0	·0919*	11. 10	·02079	21. 0	35·0	38·0
				16. 15	·02420			
				21. 29	·02900			
				23. 59	·02773			
Feb. 25		Feb. 25		Feb. 25		Feb. 25		
1. 0	21. 19. 32*	1. 0	·0909*	0. 0	·02773	1. 0	39·8	40·7
3. 0	19. 3*	3. 0	·0911*	2. 22	·02670	3. 0	43·0	44·0
9. 0	10. 42*	9. 0	·0908*	6. 42	·02028	9. 0	44·0	45·0
22. 0	12. 31*	22. 0	·0913*	10. 27	·02070	22. 0	42·3	43·8
				19. 50	·02532			
				23. 59	·02569			
Feb. 26		Feb. 26		Feb. 26		Feb. 26		
9. 0	21. 11. 42*	9. 0	·0914	0. 0	·02569	9. 0	49·0	50·0
21. 0	11. 7*	21. 0	·0904*	5. 10	·02084	21. 0	45·7	47·5
				8. 26	·02130			
				12. 44	·02084			
				16. 58	·02123			
				23. 28	·02387			
				23. 59	·02360			
Feb. 27		Feb. 27		Feb. 27		Feb. 27		
1. 0	21. 24. 19*	1. 0	·0885*	0. 0	·02360	1. 0	48·0	49·0
3. 0	21. 57*	3. 0	·0886*	2. 24	·02420	3. 0	49·0	49·0
9. 0	16. 59*	9. 0	·0902*	5. 43	·02087	9. 0	47·2	48·5
21. 0	10. 32*	21. 0	·0931*	11. 21	·02222	21. 0	42·7	44·2
				15. 30	·02452			
				19. 28	·02740			
				21. 5	·02931			
				22. 40	·02920			
				23. 59	·02832			
Feb. 28		Feb. 28		Feb. 28		Feb. 28		
1. 0	21. 21. 16*	1. 0	·0875*	0. 0	·02832	1. 0	48·0	49·0
3. 0	18. 18*	3. 0	·0871*	1. 50	·02604	3. 0	51·2	51·5

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

From February 19 to March 21, the time-piece giving motion to the Horizontal Force and Declination Cylinder was away for repair.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 28		Feb. 28		Feb. 28		Feb. 28		
h m	° ′ ″	h m		h m		h m	°	°
9. 0	21. 10. 5*	9. 0	·0893*	4. 43	·02080	9. 0	49·0	50·8
21. 0	12. 43*	21. 0	·0908*	6. 12	·02100	21. 0	41·0	43·6
				7. 8	·02152			
				12. 30:	·02338			
				19. 30	·02956			
				23. 59	·02757			
Feb. 29		Feb. 29		Feb. 29		Feb. 29		
1. 0	21. 19. 19*	1. 0	·0896*	0. 0	·02757	0. 0	43·0	44·0
3. 0	17. 43*	3. 0	·0888*	0. 47:	·02770	1. 0	44·0	45·0
9. 0	5. 38*	9. 0	·0903*	8. 45:	·01972	3. 0	47·8	48·3
21. 0	11. 14*	21. 0	·0910*	21. 28	·02870	6. 0	49·2	51·2
				23. 59	·02825	9. 0	48·2	49·5
						12. 0	46·8	47·5
						18. 0	40·5	42·5
						21. 0	40·0	42·0
Mar. 1		Mar. 1		Mar. 1		Mar. 1		
1. 0	21. 19. 47*	1. 0	·0876*	0. 0	·02825	0. 0	43·0	44·0
3. 0	18. 18*	3. 0	·0876*	1. 27	·02740	1. 0	44·7	45·8
9. 0	13. 49*	9. 0	·0898*	6. 3	·01930	3. 0	48·5	49·0
21. 0	9. 54*	21. 0	·0890*	9. 15	·01972	9. 0	49·5	49·5
				9. 48	·02012	21. 0	43·0	44·0
				10. 57	·02000			
				14. 6	·02152			
				21. 0	·02695			
				23. 41	·02810			
					(†)			
Mar. 2		Mar. 2		Mar. 2		Mar. 2		
1. 0	21. 22. 29*	1. 0	·0876*		(†)	1. 0	47·0	47·0
3. 0	20. 52*	3. 0	·0882*	0. 26	·02790	3. 0	49·0	49·6
9. 0	13. 52*	9. 0	·0896*	2. 9	·02744	9. 0	49·8	51·0
21. 0	10. 2*	21. 0	·0904*	5. 57	·02237	21. 0	42·0	43·0
				8. 43	·01972			
				11. 23	{ ·02012 ·02703			
				14. 42	·02922			
				18. 23	·02832			
				21. 41	{ ·02680 ·02577			
				23. 59	·02520			
Mar. 3		Mar. 3		Mar. 3		Mar. 3		
1. 0	21. 22. 56*	1. 0	·0873*	0. 0	·02520	1. 0	46·5	46·8
3. 0	21 40*	3. 0	·0880*	2. 12	·02326	3. 0	49·0	50·0
9. 0	17. 4*	9. 0	·0898*	7. 52:	·01788	9. 0	50·0	50·2
22. 30	12. 53*	22. 30	·0896*	14. 48	·02000	22. 30	45·0	46·7
				18. 13	·02018			
				23. 59	·02240			
Mar. 4		Mar. 4		Mar. 4		Mar. 4		
6. 45	21. 16. 50*	6. 45	·0911*	0. 0	·02240	6. 45	48·0	49·0
21. 0	14. 6*	21. 0	·0905*	3. 21	·02302	21. 0	41·8	44·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
				Mar. 4				
h m	° ′ ″	h m		h m		h m	°	°
				7. 59	·02210			
				10. 45	·02212			
				13. 43	·02292			
				17. 8	·02492			
				22. 49	{ ·02530 ·02442			
				23. 59	·02392			
Mar. 5		Mar. 5		Mar. 5		Mar. 5		
1. 0	21. 20. 46*	1. 0	·0892*	0. 0	·02392	1. 0	47·0	47·7
3. 0	18. 51*	3. 0	·0890*	1. 30	·02300	3. 0	49·0	50·5
9. 0	17. 33*	9. 0	·0908*	7. 56:	·01624	9. 0	49·0	50·3
21. 0	9. 47*	21. 0	·0913*	16. 52	·01972	21. 0	40·0	43·6
				22. 51	·02418			
				23. 59	·02405			
Mar. 6		Mar. 6		Mar. 6		Mar. 6		
1. 0	21. 26. 8*	1. 0	·0902*	0. 0	·02405	1. 0	44·8	45·3
3. 0	20. 56*	3. 0	·0898*	1. 15	·02390	3. 0	48·0	48·8
9. 0	11. 10*	9. 0	·0913*	6. 27:	·01905	9. 0	49·5	51·0
21. 0	10. 14*	21. 0	·0914*	11. 7	·01693	21. 0	45·0	47·7
				15. 43	·01707			
				20. 57	·01790			
				23. 59	·01932			
Mar. 7		Mar. 7		Mar. 7		Mar. 7		
1. 0	21. 20. 1*	1. 0	·0902*	0. 0	·01932	0. 0	45·8	46·8
3. 0	18. 54*	3. 0	·0900*	2. 16	·02008	1. 0	46·0	47·0
9. 0	12. 11*	9. 0	·0914*	5. 57	·02000	3. 0	47·3	47·5
21. 0	8. 53*	21. 0	·0908*	6. 47	·02025	6. 0	45·8	46·3
				17. 48	·02542	9. 0	43·7	44·9
				19. 40	·02520	12. 0	42·0	42·8
				23. 59	·02379	18. 0	39·6	42·0
						21. 0	39·0	42·0
Mar. 8		Mar. 8		Mar. 8		Mar. 8		
1. 0	21. 28. 16*	1. 0	·0892*	0. 0	·02379	0. 0	42·0	43·2
3. 0	19. 30*	3. 0	·0877*	2. 13	·02342	1. 0	43·6	44·4
9. 0	5. 45*	9. 0	·0903*	8. 30:	·01860	3. 0	46·0	46·5
21. 0	16. 56*	21. 0	·0885*	21. 4	·02433	9. 0	43·5	45·0
				22. 57	·02292	21. 0	37·3	40·2
				23. 59	·02289			
Mar. 9		Mar. 9		Mar. 9		Mar. 9		
1. 0	21. 22. 50*	1. 0	·0894*	0. 0	·02289	1. 0	42·7	43·0
3. 0	19. 5*	3. 0	·0897*	3. 43	·01938	3. 0	45·8	46·2
9. 0	16. 37*	9. 0	·0906*	6. 42:	·01660	9. 0	45·0	46·2
21. 0	9. 4*	21. 0	·0892*	10. 56	·01572	21. 0	36·5	38·8
				12. 50	·01610			
				22. 18	·02273			
				23. 59	·02265			
Mar. 10		Mar. 10		Mar. 10		Mar. 10		
1. 0	21. 22. 2*	1. 0	·0879*	0. 0	·02265	1. 0	41·0	42·0
3. 0	21. 45*	3. 0	·0888*	1. 39	·02195	3. 0	44·0	45·0
9. 0	13. 53*	9. 0	·0896*	10. 13:	·01480	9. 0	46·3	46·7

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar.10		Mar.10		Mar.10		Mar.10		
h m	° ′ ″	h m		h m		h m	°	°
22. 34	21. 12. 0*	22. 34	·0882*	20. 22	·01862	22. 34	40·0	42·0
				23. 59	·01928			
Mar.11		Mar.11		Mar.11		Mar.11		
8. 45	21. 13. 50*	8. 45	·0898*	0. 0	·01928	8. 45	48·2	47·8
21. 0	7. 23*	21. 0	·0900*	1. 37	·01903	21. 0	42·8	43·7
				6. 15	·01472			
				7. 29	·01513			
				12. 27	·01574			
				17. 12	·01700			
				22. 39	·01907			
					(†)			
Mar.12		Mar.12		Mar.12		Mar.12		
1. 0	21. 21. 44*	1. 0	·0891*		(†)	1. 0	46·0	46·3
3. 0	30. 29*	3. 0	·0868*	0. 25	·01870	3. 0	48·7	48·6
9. 0	12. 47*	9. 0	·0874*	2. 39	·01789	9. 0	49·0	49·0
21. 0	9. 15*	21. 0	·0886*	3. 19	·01730	21. 0	42·3	43·9
				5. 20	·01707			
				7. 0	·01808			
				9. 15	·01850			
				9. 40	·01776			
				14. 3	·01838			
				18. 10	·02085			
				22. 34	·02360			
				23. 59	·02344			
Mar.13		Mar.13		Mar.13		Mar.13		
1. 0	21. 22. 40*	1. 0	·0873*	0. 0	·02344	1. 0	47·3	48·5
3. 0	22. 26*	3. 0	·0876*	1. 35	·02260	3. 0	50·6	50·8
9. 0	10. 13*	9. 0	·0894*	4. 15	·01928	9. 0	48·0	49·0
21. 0	8. 42*	21. 0	·0892*	4. 55	·01900	21. 0	42·0	43·7
				5. 28	·01923			
				6. 29	·01850			
				9. 45	·01830			
				10. 25	·01774			
				12. 26	·01852			
				12. 45	·01809			
				17. 15	·02157			
				19. 28	·02370			
				23. 59	·02560			
Mar.14		Mar.14		Mar.14		Mar.14		
1. 0	21. 21. 38*	1. 0	·0881*	0. 0	·02560	0. 0	45·0	45·7
3. 0	21. 0*	3. 0	·0864*	1. 15	·02498	1. 0	46·8	47·0
9. 0	7. 28*	9. 0	·0890*	6. 16	·01910	3. 0	50·0	50·0
21. 0	10. 5*	21. 0	·0885*	7. 36	·01812	6. 0	53·0	52·0
				8. 46	{ ·01830	9. 0	51·2	50·7
					·02090	12. 0	48·2	49·0
				10. 28	·02048	18. 0	43·8	46·0
				11. 30	·01960	21. 0	40·5	42·8
				12. 36	·01994			
				13. 4	·01967			
				20. 39	·02773			
				23. 59	·02650			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar.15		Mar.15		Mar.15		Mar.15		
h m	° ′ ″	h m		h m		h m		
1. 0	21. 20. 55*	1. 0	·0876*	0. 0	·02650	0. 0	42·[illegible]	43·[illegible]
3. 0	19. 14*	3. 0	·0892*	1. [illegible]	·02563	1. 0	44·[illegible]	45·2
9. 0	13. 30*	9. 0	·0896*	6. 59:	·01963	3. 0	42·[illegible]	45·0
21. 0	10. 31*	21. 0	·0888*	10. 57	·018[illegible]	9. 0	45·[illegible]	48·7
				23. 59	·02312	21. 0	44·[illegible]	45·1
Mar.16		Mar.16		Mar.16		Mar.16		
1. 0	21. 17. 8*	1. 0	·0886*	0. 0	·02312	1. 0	45·2	48·[illegible]
3. 0	20. 34*	3. 0	·0894*	1. 57	·02222	3. 0	51·4	51·7
9. 0	14. 31*	9. 0	·0906*	5. 39	·01712	9. 0	53·0	53·[illegible]
21. 0	8. 40*	21. 0	·0891*	7. 10	·01788	21. 0	47·5	48·0
				12. 14	·01738			
				14. 15	·01847			
				18. 43	·02312			
				22. 36	·02558			
				23. 45	·02555			
					(†)			
Mar.17		Mar.17		Mar.17		Mar.17		
1. 0	21. 23. 37*	1. 0	·0887*		(†)	1. 0	52·0	53·0
3. 0	22. 14*	3. 0	·0855*	0. 57	·02493	3. 0	55·0	55·1
9. 0	8. 15*	9. 0	·0868*	2. 31	·02403	9. 0	54·5	55·5
22. 43	19. 15*	22. 43	·0840*	4. 28	·02137	22. 43	51·6	52·3
				8. 12	·01830			
				11. 41	·01764			
				11. 54	·01714			
				12. 22	·01693			
				13. 41	·01755			
				14. 42	·01712			
				21. 30	·02200			
				23. 59	·02287			
Mar.18		Mar.18		Mar.18		Mar.18		
8. 45	21. 11. 31*	8. 45	·0870*	0. 0	·02237	8. 45	52·2	53·8
21. 0	15. 19*	21. 0	·0866*	2. 13:	·02328	21. 0	45·0	46·8
				4. 37	·02110			
				8. 30	·01800			
				9. 30	·01830			
				9. 49	·01807			
				15. 31	·02200			
				16. 56	·02362			
				21. 8	·02698			
				23. 59	·02690			
Mar.19		Mar.19		Mar.19		Mar.19		
1. 0	21. 26. 17*	1. 0	·0865*	0. 0	·02690	1. 0	[illegible]	51·7
3. 0	20. 37*	3. 0	·0859*	1. 11	·02688	3. 0	[illegible]	53·7
9. 0	5. 48*	9. 0	·0877*	3. 30	·02408	9. 0	[illegible]	53·0
21. 0	11. 29*	21. 0	·0876*	3. 53	·02413	21. 0	48·0	49·0
				5. 3[illegible]	·02148			
				5. 59	·02150			
				7. 15	·02008			
				9. 37	·01911			
				10. 51	·01920			
				11. 12	·01877			
				11. 39	·01920			
				12. 30	·01920			
				15. 29	·02146			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
				Mar.19				
h m	° ′ ″	h m		h m		h m	°	°
				22. 22	·02572			
				23. 59	·02580			
Mar.20		Mar.20		Mar.20		Mar.20		
1. 0	21. 18. 43*	1. 0	·0876*	0. 0	·02580	1. 0	52·0	51·2
3. 0	18. 13*	3. 0	·0877*	2. 12	·02437	3. 0	54·0	53·7
9. 0	8. 30*	9. 0	·0886*	5. 21	·02066	9. 0	53·0	53·0
21. 0	9. 19*	21. 0	·0869*	8. 58	·01952	21. 0	50·0	51·3
				12. 40	·01994			
				13. 16	·02030			
				13. 55	·02018			
				15. 46	·02138			
				20. 30	·02310			
				22. 20	·02322			
				23. 59	·02228			
Mar.21		Mar.21		Mar.21		Mar.21		
1. 0	21. 23. 9*	1. 0	·0878*	0. 0	·02228	0. 0	52·3	52·8
3. 0	21. 56*	3. 0	·0878*	2. 13	·02278	1. 0	53·0	53·0
9. 0	9. 43*	9. 0	·0883*	9. 12:	·01890	3. 0	54·8	54·3
21. 0	8. 49*	21. 0	·0876*	17. 5	·02282	6. 0	54·0	54·0
				21. 25	·02712	9. 0	52·0	53·0
				23. 59	·02627	12. 0	49·7	51·6
						18. 0	43·7	46·9
						21. 0	43·4	45·3
Mar.22		Mar.22		Mar.22		Mar.22		
	(†)		(†)	0. 0	·02627	0. 0	46·0	47·0
0. 15	21. 22. 0	1. 0	·0876*	1. 54	·02570	1. 0	47·0	48·0
0. 28	21. 45	3. 0	·0867*	6. 55	·02132	3. 0	49·6	51·0
1. 15	26. 0	6. 30	·0882	10. 2	·01947	9. 0	49·8	51·0
1. 45	23. 0	6. 46	·0884	16. 7	·02312	21. 0	44·0	45·0
2. 7	22. 10	7. 5	·0882	21. 14	·02711			
2. 19	24. 50	7. 36	·0885	22. 58	·02606			
2. 40	23. 30	7. 50	·0882	23. 59	·02580			
2. 49	24. 15	8. 22	·0884					
3. 12	22. 10	8. 40	·0894					
3. 23	22. 20	8. 51	·0892					
3. 54	20. 15	9. 15	·0880					
4. 4	17. 0	9. 32	·0909					
4. 42	15. 10	9. 43	·0903					
4. 51	16. 10	9. 52	·0903					
5. 53	14. 30	10. 10	·0878					
6. 44	14. 0	10. 37	·0891					
6. 55	14. 45	10. 48	·0885					
7. 30	13. 30	11. 20	·0894					
7. 53	14. 30	14. 42	·0899					
8. 11	13. 40	15. 18:	·0897					
8. 19	15. 0	16. 7	·0903					
8. 39	11. 15	18. 36	·0907					
9. 9	17. 30	20. 2	·0900					
9. 15	16. 20		***					
9. 39	7. 10	22. 0	·0871					
9. 45	13. 10	23. 59	·0874					
9. 55	13. 25							
10. 13	16. 45							
10. 40	8. 30							
12. 15	14. 40							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.22								
h m	° ′ ″	h m		h m		h m	°	°
12. 42	21. 13. 50							
13. 15	15. 10							
13. 52	14. 0							
14. 37	14. 10							
15. 39	16. 40							
16. 21	13. 20							
17. 30	12. 20							
17. 42	11. 30							
17. 51	11. 50							
19. 0	9. 0							
20. 43	7. 10							
21. 42	10. 45							
23. 22	23. 0							
23. 59	25. 15							
Mar.23		Mar.23		Mar.23		Mar.23		
0. 0	21. 25. 15	0. 0	·0874	0. 0	·02580	1. 0	48·3	48·0
1. 6	28. 5	1. 11	·0881	2. 0	·02528	3. 0	50·0	49·0
1. 17	25. 20	1. 20	·0885	5. 42	·02388	9. 0	48·6	48·5
1. 26	26. 30	1. 38	·0879	8. 12	·02430	21. 0	43·1	44·8
1. 51	26. 10		***	10. 43	·02379			
2. 12	24. 20	2. 21	·0885	15. 4	·02448			
2. 37	20. 40	2. 47	·0883	18. 44	·02630			
2. 55	21. 30	3. 0	·0889	21. 15	{ ·02507 ·02070			
3. 23	18. 35	3. 22	·0885					
3. 40	19. 20	4. 0	·0889	23. 59	·02063			
4. 18	16. 0	4. 22	·0884					
5. 20	14. 30		***					
6. 10	14. 20	5. 3	·0887					
6. 54	12. 55	5. 10	·0891					
7. 5	13. 35	5. 27	·0888					
7. 31	10. 45	6. 20	·0894					
7. 43	11. 10	6. 42	·0891					
8. 13	6. 15	7. 5	·0899					
8. 40	8. 45	7. 23	·0897					
8. 52	8. 30	7. 45	·0898					
9. 10	5. 5	7. 52	·0897					
9. 56	9. 20	8. 20	·0911					
10. 23	11. 0	9. 7	·0897					
11. 0	11. 30	9. 25	·0898					
11. 55	14. 20	9. 47	·0892					
12. 33	12. 20	10. 11	·0897					
12. 54	13. 20	10. 33	·0893					
13. 27	11. 40		***					
14. 5	10. 50	11. 50	·0896					
14. 26	15. 0	12. 20	·0901					
15. 16:	8. 20	12. 43	·0897					
15. 42	10. 0		***					
15. 50	8. 20	13. 40	·0899					
16. 44	8. 55	13. 52	·0895					
17. 30	11. 30	15. 16	·0911					
19. 1	8. 35	15. 47	·0901					
20. 20	7. 45	16. 8	·0901					
21. 26	12. 15	16. 17	·0897					
22. 15	16. 45		***					
22. 41	20. 0	19. 15	·0899					
23. 32	23. 30	22. 17	·0876					
23. 59	24. 20	22. 36	·0877					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Mar.23						
h m	° ′ ″	h m		h m		h m	°	°
		23. 49	·0870					
		23. 59	·0871					
Mar.24		Mar.24		Mar.24		Mar.24		
0. 0	21. 24. 20	0. 0	·0871	0. 0	·02063	1. 0	47·3	47·0
0. 45	24. 5		***	1. 51	·01972	3. 0	50·0	48·8
1. 44	23. 0	2. 4	·0884	5. 17:	·01620	9. 10	51·0	49·7
2. 1	21. 50	2. 37	·0881	9. 12	·01430	21. 50	44·0	45·3
2. 13	22. 0	3. 6	·0887	14. 45	·01482			
2. 22	21. 10	3. 45	·0883	23. 59	·01882			
4. 7	15. 30	4. 18	·0885					
5. 10	14. 20	5. 43	·0882					
6. 52	13. 50	6. 54	·0890					
7. 41	8. 0	7. 17	·0887					
7. 55	10. 0		***					
8. 14	11. 0	8. 20	·0899					
8. 39	10. 30	8. 33	·0896					
8. 55	11. 45	8. 47	·0897					
10. 7	11. 10	9. 6	·0890					
10. 22	13. 0	9. 42	·0895					
11. 5	12. 50	9. 51	·0888					
11. 29	14. 20		***					
12. 7	13. 20	11. 50	·0896					
13. 36	12. 50	12. 32	·0891					
14. 0	9. 30	13. 27	·0901					
14. 25	18. 10	13. 53	·0891					
15. 9	11. 30	14. 42	·0907					
19. 12	10. 20	15. 8	·0899					
19. 21	9. 30		***					
20. 21	8. 45	19. 8	·0902					
21. 30	10. 30	22. 57	·0877					
23. 59	18. 20	23. 59	·0880					
Mar.25		Mar.25		Mar.25		Mar.25		
0. 0	21. 18. 20	0. 0	·0880	0. 0	·01882	8. 55	48·7	50·2
0. 14	21. 0		***	0. 45	·01870	21. 0	44·0	46·0
1. 10	22. 40	3. 15	·0891	11. 12:	·01430			
3. 36	19. 0	4. 10	·0893	22. 16	·01812			
5. 11	16. 20	4. 27	·0889	23. 59	·01798			
6. 30	15. 40	4. 43	·0892					
6. 44	16. 20	5. 9	·0890					
7. 7	14. 30	5. 23	·0892					
8. 12	14. 10	5. 47	·0885					
9. 25	12. 45	6. 10	·0891					
9. 51	10. 25	6. 25	·0886					
10. 7	10. 50	6. 44	·0894					
10. 29	9. 30	6. 52	·0894					
11. 38	12. 0	7. 3	·0891					
13. 1	13. 45	7. 32	·0897					
17. 55	11. 30	7. 45	·0894					
19. 51	6. 0	8. 3	·0899					
20. 39	5. 40	8. 16	·0895					
21. 15	7. 55	8. 45	·0899					
22. 29	15. 0	9. 22	·0899					
23. 28	23. 0	9. 40	·0897					
23. 59	24. 45		***					
		10. 28	·0897					
		11. 30	·0896					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Mar.25						
h m	° ′ ″	h m		h m		h m	°	°
		18. 7	·0906					
		19. 15	·0903					
		21. 43	·0874					
			***					
		23. 40	·0866					
		23. 59	·0870					
Mar.26		Mar.26		Mar.26		Mar.26		
0. 0	21. 24. 45	0. 0	·0871	0. 0	·01798	1. 0	[illegible]	[illegible]
0. 30	25. 40		***	1. 44	·01677	3. 0	51·[illegible]	51·[illegible]
1. 49	24. 50	0. 46	·0881	5. 40	·01610	9. 0	51·5	51·2
4. 10	16. 35	1. 15	·0878	8. 32	·01516	21. 0	43·0	45·0
7. 0	12. 30	2. 14	·0887	11. 29	·01544			
7. 40	12. 45	2. 43	·0888	14. 39	·01674			
8. 12	8. 10	3. 8	·0885	14. 45	·01640			
9. 28	10. 0	3. 51	·0888	15. 31	·01775			
9. 43	8. 30	4. 7	·0885	20. 21	·02192			
10. 9	7. 45		***	22. 19	·02310			
10. 32	11. 0	6. 18	·0894	23. 59	·02270			
11. 40	13. 5	6. 37	·0890					
13. 35	12. 50	7. 17	·0889					
	(†)	7. 36	·0892					
15. 13	21. 1. 0	7. 50	·0887					
15. 30	20. 59. 30	8. 13	·0887					
15. 43	21. 2. 10	9. 2	·0871					
16. 5	8. 30	9. 42	·0883					
16. 11	7. 30	10. 3	·0883					
16. 17	9. 50	10. 37	·0897					
16. 31	9. 15		***					
16. 45	11. 25	12. 43	·0899					
17. 11	8. 0	12. 49	·0897					
17. 16	11. 50		***					
17. 37	9. 45	13. 2	·0899					
17. 45	11. 15		***					
17. 59	10. 20	13. 40	·0900					
18. 8	10. 55	14. 0	·0918					
18. 26	6. 40	14. 10	·0911					
18. 40	12. 30		***					
18. 47	10. 40	14. 43	·0902					
19. 4	12. 10	14. 50	·0918					
19. 12	11. 30	15. 28	·0894					
19. 21	16. 55	15. 42	·0901					
19. 27	16. 20		***					
19. 41	19. 30	16. 1	·0900					
20. 21	10. 0		***					
20. 37	7. 40	16. 42	·0908					
20. 58	7. 10	16. 50	·0905					
21. 9	8. 30	16. 54	·0907					
21. 22	6. 55	17. 3	·0903					
21. 43	11. 40	17. 17	·0911					
21. 54	11. 0		***					
22. 13	14. 45	18. 13	·0912					
22. 20	14. 5	18. 28	·0917					
	***	18. 40	·0911					
23. 37	18. 55	18. 51	·0911					
	(†)	19. 2	·0908					
			***					
		20. 6	·0913					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	° ′	Mar. 26		h m		h m	°	°
		h m						
		20. 48	·0901					
		21. 5	·0903					
		21. 30	·0847					
		21. 45	·0885					
		21. 57	·0885					
		22. 23	·0874					
		22. 47	·0873					
		23. 35	·0866					
			(†)					
Mar. 27		Mar. 27		Mar. 27		Mar. 27		
1. 0	21. 22. 40*	1. 0	·0870*	0. 0	·02270	1. 0	47·0	47·3
3. 0	21. 39*	3. 0	·0882*	1. 29	·02236	3. 0	49·5	49·7
9. 0	9. 38*	9. 0	·0894*	8. 24;	·01657	9. 0	50·0	51·0
21. 0	6. 14*	21. 0	·0868*	14. 14	·01724	21. 0	50·0	51·3
				16. 30	·01713			
				17. 11	·01650			
				18. 27	·01644			
				18. 50	·01673			
				19. 22	·01648			
				19. 43	·01691			
				20. 37	·01672			
				20. 52	·01700			
				21. 11	·01640			
				23. 59	·01707			
Mar. 28		Mar. 28		Mar. 28		Mar. 28		
1. 0	21. 28. 7*	1. 0	·0852*	0. 0	·01707	0. 0	53·7	53·8
3. 0	25. 23*	3. 0	·0819*	0. 37	·01712	1. 0	54·8	54·7
9. 0	5. 50*	9. 0	·0826*	1. 45	·01557	3. 0	57·0	58·0
21. 0	21. 8*	21. 0	·0768*	3. 43	·01820	6. 0	59·5	59·0
				8. 24	{ ·01884	9. 0	58·7	58·5
					·02264	12. 0	57·2	57·0
				11. 42	·02107	18. 0	53·2	54·0
				12. 12	·01980	21. 0	53·0	54·0
				13. 7	·02090			
				13. 40	·02011			
				14. 37	·02000			
				14. 50	·02090			
				14. 58	·02030			
				15. 42	·02130			
				16. 12	·02040			
				16. 30	·02092			
				16. 41	·02052			
				16. 57	·02077			
				17. 12	·02200			
				17. 24	·02140			
				17. 40	·02190			
				17. 50	·02270			
				18. 7	·02206			
				18. 25	·02309			
				18. 40	·02288			
				19. 25	·02342			
				20. 39	·02612			
				21. 22	·02650			
					(†)			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 29		Mar. 29		Mar. 29		Mar. 29		
h m	° ′ ″	h m		h m		h m	°	°
1. 0	21. 28. 6*	1. 0	·0834*		(†)	0. 0	55·0	55·3
3. 0	44. 23*	3. 0	·0871*	0. 13	·01622	1. 0	56·0	56·0
9. 0	9. 27*	9. 0	·0835*	1. 10	·01696	3. 0	58·2	58·0
21. 0	13. 21*	21. 0	·0822*	1. 27	·01660	9. 0	57·8	58·1
					(†)	21. 0	51·5	52·7
				2. 41	·01632			
				2. 54	·01677			
				3. 2	·01670			
				3. 30	·01820			
				4. 39	·01864			
				4. 45	·01957			
				5. 11	·01922			
				5. 30	·01950			
				5. 54	·01887			
				6. 54	·01876			
				7. 15	·01748			
				7. 40	·01848			
				8. 15	·01790			
				8. 40	·01800			
				9. 24	·01713			
				10. 5	·01806			
				10. 37	·01922			
				10. 47	·01780			
				11. 42	·01750			
				14. 43	·01912			
				15. 11	·01872			
				17. 37	·02141			
				21. 43	·02412			
				22. 40	·02337			
				23. 59	·02290			
Mar. 30		Mar. 30		Mar. 30		Mar. 30		
	(†)		(†)	0. 0	·02290	1. 0	54·8	54·5
1. 0	21. 24. 22*	0. 27	·0836	4. 7	·02230	3. 0	56·0	55·0
1. 30	23. 30	0. 46	·0832	8. 0	·02079	9. 0	55·2	54·0
1. 48	21. 40	1. 48	·0844	13. 43	·02323	21. 0	51·0	51·8
1. 55	21. 55	2. 17	·0846	23. 59	·01851			
2. 37	19. 20	2. 38	·0844					
2. 50	18. 20		(†)					
3. 0	19. 0	3. 0	·0852*					
3. 39	15. 0	3. 46	·0867					
3. 44	15. 20	4. 17	·0878					
4. 0	10. 30	5. 25	·0866					
4. 28	12. 30	6. 8	·0868					
5. 15	12. 40	6. 20	·0873					
6. 23	8. 45	6. 40	·0861					
6. 37	11. 15	6. 58	·0867					
6. 52	10. 0	7. 34	·0861					
7. 12	12. 15	8. 0	·0871					
7. 25	12. 25	8. 19	·0864					
7. 50	9. 0	14. 45	·0870					
8. 23	14. 0	15. 30	·0868					
12. 42	14. 0	18. 30	·0877					
14. 0	12. 40		***					
15. 28	13. 0	20. 15	·0855					
15. 52	13. 50	21. 36	·0841					
17. 30	12. 45	22. 15	·0842					
17. 52	13. 20		***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.30		Mar.30						
h m	° ′ ″	h m		h m		h m	°	°
18. 21	21. 12. 45	23. 46	·0853					
18. 30	11. 40		***					
18. 44	12. 20	23. 59	·0853					
20. 6	9. 15							
20. 25	10. 0							
20. 39	9. 30							
22. 0	12. 20							
23. 29	19. 0							
23. 59	21. 55							
Mar.31		Mar.31		Mar.31		Mar.31		
0. 0	21. 21. 55	0. 0	·0853	0. 0	·01851	1. 0	53·0	52·7
0. 28	21. 30	2. 27	·0864	3. 5	·01850	3. 0	55·0	53·8
0. 42	23. 0	2. 38	·0861	5. 22	·01772	9. 0	53·9	53·4
1. 11	22. 30	2. 47	·0863	6. 49	·01765	22. 20	51·0	51·4
1. 17	24. 35	2. 58	·0861	10. 58	·01890			
2. 9	23. 40	4. 0	·0875		·01827			
2. 29	19. 50	4. 47	·0871	12. 21	·01850			
2. 53	18. 25	5. 49	·0878	12. 52	·01832			
3. 2	18. 40	6. 50	·0874	15. 15	·01862			
3. 38	16. 45	8. 36	·0883	15. 40	·01837			
6. 8	12. 30	9. 2	·0881	20. 14	·01810			
6. 30	12. 20	10. 23	·0886		·01772			
7. 37	10. 15	10. 40	·0881	23. 59	·01776			
7. 51	11. 0	11. 10	·0879					
10. 8	13. 10	11. 21	·0881					
10. 52	10. 30	11. 33	·0877					
12. 11	9. 40	12. 15	·0877					
12. 29	13. 40	12. 37	·0885					
13. 16	6. 45	12. 44	·0885					
13. 54	8. 10	12. 58	·0891					
14. 9	9. 50	13. 23	·0890					
14. 15	8. 30	13. 30	·0884					
14. 43	11. 5	14. 4	·0877					
15. 15	18. 30	14. 45	·0878					
15. 43	14. 20	15. 10	·0875					
15. 50	14. 45	15. 42	·0889					
16. 21	10. 50		***					
16. 42	12. 30	17. 0	·0892					
16. 54	13. 0		***					
17. 15	11. 45	19. 15	·0865					
17. 57	13. 20	20. 3	·0864					
18. 29	12. 30	20. 18	·0859					
19. 11	9. 20	21. 2	·0860					
20. 0	13. 0	22. 4	·0851					
20. 45	10. 30	23. 59	·0856					
21. 4	11. 45							
21. 12	11. 20							
21. 16	11. 50							
21. 30	11. 20							
21. 57	13. 15							
22. 10	13. 0							
23. 59	19. 30							
Apr. 1		Apr. 1		Apr. 1		Apr. 1		
0. 0	21. 19. 30	0. 0	·0856	0. 0	·01776	8. 0	54·0	53·5
0. 44	19. 45	1. 3	·0860	1. 55	·01769	21. 0	48·0	48·0
1. 13	21. 40	1. 45	·0856	9. 30:	·01422			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 1		Apr. 1		Apr. 1				
h m	° ′ ″	h m		h m		h m	°	°
2. 13	21. 19. 50	2. 17	·0867	19. 36	[illegible]			
2. 31	20. 35	3. 24	·0868	20. 46	·01720			
3. 14	18. 20	3. 42	·0872	23. 59	·01622			
4. 54	15. 20	4. 15	·0869					
5. 7	15. 30	5. 47	·0872					
5. 17	14. 40	6. 5	·0876					
6. 44	14. 25	6. 21	·0874					
7. 16	13. 20	7. 43	·0881					
9. 50	14. 30	8. 0	·0875					
10. 25	13. 45	8. 37	·0881					
11. 0	15. 5	11. 46	·0887					
12. 43	12. 15	13. 36	·0899					
12. 54	12. 40	13. 53	·0894					
13. 10	11. 50	18. 15	·0897					
13. 45	13. 0	20. 3	·0892					
14. 14	11. 40	21. 41:	·0869					
	***	22. 15	·0880					
18. 11	10. 30	23. 43	·0861					
19. 44	6. 0	23. 59	·0864					
20. 2	7. 0							
20. 50	6. 40							
21. 38	11. 40							
21. 54	11. 40							
23. 59	21. 0							
Apr. 2		Apr. 2		Apr. 2		Apr. 2		
0. 0	21. 21. 0	0. 0	·0864	0. 0	·01622	1. 0	50·0	49·3
1. 10	22. 20	0. 34	·0869	2. 16	·01597	3. 0	52·0	51·0
1. 16	21. 35	1. 6	·0866	8. 14	·01360	9. 0	49·0	50·0
2. 0	22. 10	4. 22	·0885	11. 3	·01380	21. 0	45·8	45·3
2. 57	19. 30	4. 48	·0881	12. 0	·01344			
[illegible]	18. 20		***	14. 12	·01530			
4. 56	15. 30	5. 50	·0891	16. 49	·01643			
5. 51	14. 0	6. 53	·0889	20. 57	·01650			
6. 15	14. 55	7. 40	·0896	23. 59	·01507			
6. 30	14. 0	8. 7	·0897					
7. 12	15. 0	8. 23	·0901					
9. 41	15. 30	9. 0	·0893					
10. 30	13. 40		***					
11. 13	1. 15	10. 16	·0895					
11. 32	7. 0	10. 33	·0908					
11. 52	1. 0	10. 47	·0902					
12. 0	5. 50	11. 5	·0921					
14. 21	14. 20	11. 37	·0881					
15. 1	13. 45	11. 47	·0904					
15. 13	14. 20	12. 13	·0880					
15. 24	13. 30	12. 36	·0874					
16. 0	18. 45	15. 7	·0906					
16. 30	15. 30	16. 45	·0897					
16. 39	15. 40	17. 33	·0907					
16. 55	13. 5	17. 50	·0898					
17. 26	12. 45	18. 7	·0905					
17. 35	14. 5	18. 40	·0892					
17. 55	12. 20	18. 50	·0896					
18. 17	13. 45	19. 1	·0895					
18. 30	10. 40	21. 25	·0873					
18. 50	16. 0	21. 38	·0876					
19. 11	11. 10	22. 14	·0857					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 2		Apr. 2						
h m	° ′ ″	h m		h m		h m	°	°
19. 27	21. 10. 30	22. 50	·0864					
19. 59	12. 50	23. 15	·0846					
20. 51	12. 50	23. 39	·0851					
21. 6	15. 50		(†)					
21. 43	14. 25							
21. 51	16. 15							
21. 56	15. 30							
23. 15	27. 10							
23. 30	26. 10							
23. 39	27. 30							
23. 59	25. 0							
Apr. 3		Apr. 3		Apr. 3		Apr. 3		
0. 0	21. 25. 0		(†)	0. 0	·01507	1. 0	49·0	50·0
1. 4	27. 20	1. 0	·0861*	1. 51	·01447	3. 0	53·0	53·8
1. 40	25. 10	3. 0	·0873	4. 29	·01007	9. 0	54·5	54·8
1. 44	26. 30	9. 0	·0875*	5. 21	·01195	21. 0	46·0	47·0
1. 58	25. 0	12. 12	·0881	9. 11	·01529			
2. 10	25. 10	15. 47	·0886	11. 14	·01552			
2. 40	20. 40	16. 23	·0881	11. 52	·01570			
3. 21	17. 45	17. 34	·0889	21. 52	·02256			
3. 51	18. 0	18. 16	·0888	23. 59	·02207			
4. 50	13. 30	18. 30	·0892					
5. 14	12. 20	19. 53	·0881					
8. 7	13. 30	20. 17	·0883					
8. 40	11. 0	20. 54	·0863					
9. 30	13. 50	21. 22	·0868					
10. 16	11. 20	22. 10	·0862					
10. 28	12. 20	22. 36	·0850					
10. 46	10. 0	23. 8	·0859					
10. 52	11. 15	23. 23	·0854					
11. 12	10. 40	23. 59	·0860					
11. 30	12. 30							
12. 6	11. 0							
13. 55	11. 40							
14. 10	10. 30							
14. 43	13. 10							
14. 58	12. 15							
15. 28	15. 45							
16. 0	12. 30							
	***							
17. 58	8. 55							
18. 10	10. 20							
18. 22	7. 30							
18. 30	9. 30							
	***							
19. 11	7. 50							
19. 21	5. 0							
19. 37	8. 10							
20. 12	6. 20							
20. 36	8. 30							
	***							
21. 2	8. 20							
21. 55	14. 10							
22. 15	18. 30							
22. 30	17. 5							
23. 10	22. 30							
23. 28	20. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 3								
h m	° ′ ″	h m		h m		h m	°	°
23. 41	21. 22. 50							
23. 50	21. 40							
23. 59	23. 55							
Apr. 4		Apr. 4		Apr. 4		Apr. 4		
0. 0	21. 24. 5	0. 0	·0860	0. 0	·02207	0. 0	50·0	51·0
0. 7	25. 30	0. 16	·0855	1. 28	·02130	1. 0	51·9	52·8
0. 27	23. 35	0. 36	·0860	3. 52	·01748	3. 0	55·0	56·
0. 53	24. 50	1. 20	·0850	5. 39	·01550	6. 0	58·0	57·
1. 51	18. 35	2. 0	·0864	8. 0	·01806	9. 0	56·0	56·3
2. 15	18. 50	2. 7	·0861	10. 22	·01848	12. 0	53·6	54·8
2. 45	15. 40	2. 11	·0864	13. 0	·01947	18. 0	47·5	50·
3. 27	14. 45	2. 40	·0855	21. 12	·02590	21. 0	47·5	49·
4. 10	11. 50	4. 50	·0872	23. 59	·02522			
4. 17	12. 5		(†)					
4. 30	10. 30	12. 0	·0885					
5. 8	9. 30	17. 40:	·0896					
5. 26	10. 50	18. 45	·0884					
6. 9	8. 20	19. 49	·0890					
6. 56	11. 20	21. 7	·0857					
7. 15	10. 30		***					
7. 29	11. 30	23. 0	·0851					
7. 55	8. 35	23. 55	·0861					
8. 14	10. 45		(†)					
8. 26	10. 10							
9. 19	12. 20							
9. 58	12. 20							
10. 18	17. 30							
10. 46	13. 0							
15. 59	13. 45							
18. 6	10. 0							
18. 54	9. 40							
19. 14	7. 30							
19. 42	7. 0							
19. 51	5. 30							
20. 30	9. 0							
20. 42	8. 35							
20. 54	10. 30							
21. 25	10. 0							
	***							
23. 59	19. 30							
Apr. 5		Apr. 5		Apr. 5		Apr. 5		
0. 0	21. 19. 30		(†)	0. 0	·02522	0. 0	51·7	52·3
0. 39	22. 40	0. 25	·0868	2. 15	·02390	1. 0	52·7	52·8
1. 38	20. 20	1. 15	·0855	6. 55	·01847	3. 0	54·8	55·0
2. 0	21. 0	2. 0	·0865	10. 47	·01860	9. 0	56·2	56·5
3. 14	16. 10	3. 7	·0856	14. 10	·01984	22. 30	50·0	50·5
4. 59	12. 0	4. 50	·0874	20. 15	·02285			
5. 26	10. 10	5. 25	·0866	23. 59	·02338			
6. 41	10. 5		***					
7. 24	11. 30	8. 35	·0878					
11. 52	13. 0		***					
12. 49	12. 0	13. 30	·0887					
14. 40	14. 35	13. 56	·0882					
16. 28	12. 50	14. 35	·0887					
16. 56	11. 30	16. 0:	·0886					
17. 24	12. 0	18. 45:	·0891					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 5		Apr. 5						
h m	° ′ ″	h m		h m		h m	°	°
18. 58	21. 8. 5	21. 30:	·0862					
19. 17	8. 40	23. 0	·0864					
19. 28	10. 10	23. 59	·0862					
19. 42	7. 50							
21. 9	9. 45							
21. 28	11. 40							
22. 10	10. 20							
23. 7	14. 30							
23. 20	17. 0							
	(†)							
Apr. 6		Apr. 6		Apr. 6		Apr. 6		
0. 0	21. 20. 55	0. 0	·0862	0. 0	·02338	7. 10	57 ·0	58 ·0
1. 10	23. 50	0. 5	·0865	2. 39:	·02355	21. 5	51 ·4	52 ·8
2. 27	21. 40	0. 39	·0859	7. 42	·01864			
4. 28	14. 40	1. 0	·0865	9. 11	·01992			
6. 19	12. 0	2. 7	·0867	12. 44	·01970			
10. 36	12. 40	2. 38	·0875	21. 14	·02600			
11. 42	16. 0	3. 20	·0869	22. 43	·02637			
11. 58	13. 50	3. 45	·0872	23. 59	·02572			
12. 13	16. 20	3. 58	·0877					
13. 10	12. 20	4. 30	·0873					
16. 59	12. 5		***					
17. 14	13. 10	6. 22	·0882					
17. 43	12. 30		***					
17. 55	13. 20	9. 12	·0879					
18. 45	9. 20		***					
19. 10	9. 50	11. 15	·0883					
19. 53	8. 0	11. 30	·0880					
20. 43	9. 30	11. 46	·0890					
21. 9	12. 50	12. 7	·0898					
21. 29	12. 0		***					
22. 13	16. 40	13. 7	·0884					
22. 44	16. 50	14. 19	·0880					
22. 54	17. 40	16. 15	·0888					
23. 11	17. 30	17. 15	·0882					
23. 59	20. 10	17. 40	·0888					
		18. 0	·0884					
		18. 16	·0888					
			***					
		19. 38	·0885					
		20. 52	·0862					
		21. 15	·0861					
		21. 32	·0864					
		22. 35	·0846					
		22. 53	·0850					
		23. 59	·0848					
Apr. 7		Apr. 7		Apr. 7		Apr. 7		
0. 0	21. 20. 10	0. 0	·0848	0. 0	·02572	1. 0	57 ·0	57 ·2
0. 43	22. 35	1. 30	·0860	2. 3	·02442	3. 0	59 ·5	59 ·8
2. 11	22. 50	2. 13	·0866	5. 10	·01963	9. 0	61 ·8	61 ·0
4. 21	13. 0	2. 40	·0860	6. 4	·02008 ·02263	21. 12	52 ·0	52 ·3
5. 54	12. 0	4. 5	·0858					
10. 44	12. 30	4. 41	·0862	8. 31	·02063			
11. 15	11. 50	5. 4	·0859	10. 11	·02056			
13. 45	11. 50	6. 6	·0868	10. 49	·02106			
14. 12	13. 0	6. 20	·0865	11. 43	·02110			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 7		Apr. 7		Apr. 7				
h m	° ′ ″	h m		h m		h m	°	°
14. 54	21. 11. 10	7. 25	·0870	11. 57	·0216[illegible]			
15. 22	12. 30		***	13. 47	·02303			
16. 3	12. 0	12. 10	·0870	17. 4	[illegible]			
16. 30	12. 40		***	23. 11	·02040			
18. 8	11. 10	14. 31	·0878	23. 59	·02017			
18. 29	8. 20	15. 0	·0876					
18. 50	9. 30	15. 45	·0881					
19. 41	6. 0	16. 30	·0880					
20. 51	5. 40	17. 45:	·0885					
22. 20	12. 30	18. 30	·0884					
22. 37	16. 30	19. 35	·0875					
22. 52	16. 45	21. 45	·0858					
23. 59	21. 30	23. 59	·0848					
Apr. 8		Apr. 8		Apr. 8		Apr. 8		
0. 0	21. 21. [illegible]	0. 0	·0848	0. 0	·02017	8. 32	56 ·0	55 ·[illegible]
0. 12	23. 0	0. 22	·0843	2. 13	·02012	21. 0	51 ·2	50 ·[illegible]
0. 45	21. 10	2. 10	·0871	8. 0	·01900			
2. 0	21. 50	4. 40	·0882	11. 11	·01938			
4. 0	16. 30	4. 54	·0879	14. 36:	·01917			
5. 37	13. 20	5. 0	·0884	19. 27	·02092			
11. 9	11. 35	5. 38	·0876	21. 42	·01927			
17. 0	13. 30		***	22. 42	[illegible]			
17. 12	12. 40	7. 7	·0886	23. 59	·01770			
17. 18	13. 20	9. 0	·0889					
18. 24	12. 5		***					
18. 37	13. 10	12. 25	·0885					
19. 27	9. 20	13. 30	·0889					
19. 44	10. 20	15. 16:	·0888					
19. 55	9. 25	16. 40	·0891					
20. 16	13. 20	18. 0:	·0900					
20. 43	12. 50	18. 36	·0907					
20. 46	13. 40	20. 30	·0886					
21. 21	8. 0	20. 53	·0885					
21. 35	14. 0	21. 40	·0860					
21. 45	12. 20	22. 4	·0868					
21. 54	14. 40	22. 21	·0865					
22. 18	14. 0	22. 45	·0868					
23. 14	21. 55	23. 35	·0860					
23. 37	22. 0		***					
23. 59	26. 10	23. 59	·0863					
Apr. 9		Apr. 9		Apr. 9		Apr. 9		
0. 0	21. 26. 10	0. 0	·0863	0. 0	·01770	1. 0	54 ·0	53 ·[illegible]
0. 12	27. 0	0. 30	·0873		***	3. 0	56 ·0	54 ·[illegible]
0. 30	26. 30	0. 57	·0883	4. 29	·01672	9. 0	54 ·0	53 ·[illegible]
0. 37	27. 40	1. 6	·0871	4. 57	·01718	21. 0	44 ·3	45 ·[illegible]
0. 42	27. 20		***	5. 26	·01663			
0. 59	31. 55	1. 39	·0871	6. 7	·01669			
1. 5	30. 5	1. 50	·0867	7. 12	·01517			
1. 14	31. 30	1. 58	·0874	7. 43	·01518			
1. 26	29. 10	2. 7	·0892	8. 25	·01290			
1. 30	30. 0		***	8. 55	·01422			
1. 37	29. 0	2. 26	·0881	9. 43	·01267			
1. 42	30. 5	2. 40	·0902	10. 4	[illegible]			
1. 52	27. 55	2. 50	·0886	10. 15	·01187			
1. 59	27. 40	2. 58	·0899	11. 10	·01382			
2. 10	31. 20	3. 6	·0893	11. 24	[illegible]			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 9		Apr. 9		Apr. 9				
h m	° ′ ″	h m		h m		h m	°	°
2. 27	21. 30. 0	3. 9	·0897	13. 13	·01500			
2. 44	37. 40	3. 17	·0882	14. 14	·01497			
2. 49	36. 40	3. 20	·0866	15. 41	·01590			
3. 0	38. 0	3. 28	·0882	18. 31	·01922			
3. 15	29. 0	3. 33	·0858	22. 11	·01600			
3. 20	32. 45	3. 42	·0850	23. 59	·01552			
3. 29	28. 0	4. 4	·0882					
3. 46	23. 20	4. 7	·0868					
3. 56	27. 0	4. 21	·0886					
4. 11	27. 20	4. 28	·0878					
4. 16	33. 0	5. 1	·0918					
4. 29	30. 0	5. 20	·0889					
4. 43	33. 10	5. 36	·0919					
4. 59	29. 0	5. 58	·0882					
5. 1	29. 50	6. 6	·0891					
5. 16	21. 0	6. 20	·0859					
5. 22	21. 20	6. 24	·0863					
5. 28	20. 30	6. 33	·0856					
5. 49	27. 5		***					
5. 59	23. 30	7. 2	·0872					
6. 2	22. 30	7. 10	·0864					
6. 11	28. 50	7. 16	·0868					
6. 26	18. 20		***					
6. 30	22. 10	7. 30	·0858					
6. 53	12. 0	7. 52	·0870					
7. 7	9. 50	8. 7	·0897					
7. 14	12. 10	8. 15	·0870					
7. 21	11. 20	8. 21	·0875					
7. 26	11. 50	8. 36	·0831					
7. 37	10. 0	8. 46	·0845					
7. 40	10. 30	8. 52	·0842					
7. 59	6. 20	9. 5	·0867					
8. 14	23. 0	9. 8	·0853					
8. 22	18. 30	9. 11	·0856					
8. 30	25. 30	9. 38	·0855					
8. 53	21. 9. 50	9. 51	·0828					
9. 10	20. 55. 40	10. 5	·0854					
9. 20	21. 5. 30	10. 14	·0814					
9. 28	2. 10	10. 50	·0846					
9. 41	10. 0	10. 54	·0837					
9. 48	5. 20	11. 18	·0888					
9. 58	9. 10	11. 30	·0898					
10. 10	4. 0	11. 55	·0864					
10. 16	25. 40	12. 10	·0875					
11. 0	21. 8. 20		***					
11. 24	20. 49. 30	12. 24	·0871					
11. 30	57. 15	12. 30	·0879					
11. 37	20. 55. 30	12. 38	·0858					
11. 54	21. 6. 0	12. 44	·0866					
12. 0	21. 3. 55	12. 50	·0856					
12. 14	20. 57. 30	13. 8	·0864					
12. 20	56. 0	13. 12	·0858					
12. 25	58. 50	13. 25	·0865					
12. 41	20. 59. 0	13. 32	·0860					
12. 51	21. 3. 0	13. 40	·0865					
12. 55	2. 35	13. 51	·0854					
13. 0	5. 20	14. 16	·0842					
13. 10	3. 10	14. 35	·0840					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 9		Apr. 9						
h m	° ′ ″	h m		h m		h m	°	°
13. 20	21. 9. 0	15. 10	·0882					
13. 44	3. 30	15. 24	·0883					
14. 0	4. 20		***					
14. 14	3. 10	15. 58	·0857					
14. 41	15. 50	16. 15	·0854					
14. 47	15. 0	16. 35	·0880					
	***	16. 47	·0872					
15. 12	15. 0	17. 10	·0866					
15. 18	11. 30		***					
15. 38	13. 50	18. 19	·0869					
15. 57	10. 40	18. 30	·0864					
16. 40	15. 50	18. 33	·0868					
17. 2	12. 30	18. 46	·0866					
	***	18. 55	·0858					
18. 9	11. 0		***					
18. 42	16. 0	20. 23	·0852					
19. 4	13. 0	20. 53	·0830					
19. 20	15. 0	20. 59	·0835					
19. 30	13. 0	21. 5	·0834					
20. 25	12. 5	21. 47	·0838					
20. 50	15. 40	22. 2	·0827					
20. 54	14. 30	22. 8	·0836					
20. 58	16. 20	22. 15	·0827					
21. 10	17. 0	22. 25	·0824					
21. 24	14. 30	22. 34	·0832					
22. 0	17. 20		***					
22. 12	20. 0	23. 10	·0842					
22. 25	20. 0	23. 59	·0849					
23. 29	24. 0							
23. 59	22. 0							
Apr. 10		Apr. 10		Apr. 10		Apr. 10		
0. 0	21. 22. 0	0. 0	·0850	0. 0	·01552	1. 0	49 ·0	49 ·4
0. 16	22. 50		***	2. 7	·01438	3. 0	52 ·3	52 ·7
0. 40	21. 10	2. 25	·0886	8. 17	·00827	9. 0	52 ·0	52 ·4
0. 54	22. 30	2. 55⁚	·0872	9. 45	·00795	21. 0	43 ·0	45 ·0
1. 15	22. 50		***	10. 52	·00800			
1. 50	18. 30	3. 30	·0880	15. 12⁚	·01029			
1. 54	19. 20	3. 40	·0872	21. 15	·01563			
2. 11	17. 10	3. 52	·0876	23. 59	·01358			
2. 29	17. 55	4. 16	·0868					
2. 44	15. 15	4. 35	·0874					
3. 30	15. 20		***					
3. 43	14. 35	5. 9	·0905					
4. 12	15. 0	5. 23	·0905					
4. 30	13. 40	5. 36	·0881					
5. 9	6. 40	5. 59	·0906					
5. 30	12. 30	6. 9	·0894					
5. 50	6. 0		***					
6. 9	11. 30	6. 36	·0893					
6. 33	12. 30	6. 50	·0883					
7. 0	9. 45	7. 30	·0878					
7. 21	12. 20	7. 40	·0897					
7. 40	6. 30	7. 51	·0893					
7. 49	11. 40	8. 5	·0906					
7. 57	9. 0	8. 25	·0883					
8. 16	16. 0		***					
8. 36	12. 0	9. 16	·0898					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁚ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr.10		Apr.10						
h m	° ′							
9. 14	21. 13. 40	9. 43	·0887					
9. 25	15. 40	10. 5	·0878					
9. 43	14. 0	10. 37	·0900					
9. 50	14. 45	11. 6	·0886					
10. 13	10. 5		***					
10. 30	10. 0	12. 0:	·0881					
10. 46	13. 40	13. 0	·0888					
11. 27	10. 15		***					
11. 34	11. 40	14. 15	·0884					
12. 15	10. 20	15. 0:	·0894					
12. 49	12. 35	16. 5	·0889					
12. 55	12. 20	16. 24	·0894					
13. 34	16. 30		***					
14. 4	14. 30	18. 10	·0888					
15. 1	12. 0	19. 7:	·0893					
15. 43	12. 20		***					
17. 7	9. 30	21. 2	·0886					
17. 14	10. 10	21. 25	·0876					
18. 7	11. 0	21. 46	·0875					
18. 39	9. 20	22. 1	·0863					
19. 9	11. 30	22. 25	·0852					
19. 30	9. 0	22. 55	·0856					
20. 10	7. 55	23. 10	·0866					
20. 30	11. 0		(†)					
20. 52	8. 0							
21. 22	11. 30							
21. 37	11. 0							
23. 37	16. 20							
23. 46	15. 30							
23. 59	16. 30							
Apr.11		Apr.11		Apr.11		Apr.11		
0. 0	21. 16. 30		(†)	0. 0	·01358	0. 0	45·7	46·8
0. 12	16. 30	0. 15	·0872	3. 44	·01122	1. 0	47·0	48·0
1. 13	20. 30	1. 7	·0878	8. 27	·00721	3. 0	49·0	50·0
1. 50	18. 40	1. 30	·0873	9. 30	·00717	6. 0	51·5	52·2
2. 3	18. 40	1. 47	·0875	10. 40	·00600	9. 0	51·5	51·5
2. 15	20. 10	2. 0	·0883	11. 4	·00643	12. 0	50·5	51·0
2. 46	17. 30	2. 18	·0885	13. 19	·00644	18. 0	47·0	48·0
3. 35	17. 55	2. 51	·0899	16. 54	·00783	21. 0	46·5	48·3
3. 39	13. 40	3. 22	·0905	20. 12	·00947			
3. 51	12. 50		***	21. 59	·00988			
6. 2	13. 30	4. 25	·0901	23. 59	·00929			
6. 40	13. 5	5. 7	·0906					
6. 51	10. 40	5. 36	·0904					
7. 6	11. 35	5. 45	·0907					
7. 15	10. 30	6. 3	·0900					
7. 20	11. 30	6. 13	·0901					
7. 43	6. 5	6. 25	·0898					
8. 0	8. 45	6. 42	·0904					
8. 17	5. 50	6. 54	·0912					
8. 26	8. 10	7. 1	·0908					
8. 53	3. 10	7. 23	·0911					
9. 28	7. 10	7. 32	·0910					
9. 40	7. 30	7. 40	·0913					
9. 57	11. 20	8. 7	·0899					
10. 6	7. 0	8. 16	·0901					
10. 29	17. 20	8. 40	·0885					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr.11		Apr.11						
h m	° ′						°	
[illegible]	21. 2. 5	8. 57	·0886					
11. 11	7. 35	9. 22:	·0880					
11. 26	6. [illegible]	9. 51	·0887					
11. 41	8. 0	10. 8	[illegible]					
11. 48	7. 10	10. 39	·0873					
11. 58	9. 30	11. 0	[illegible]					
12. 0	9. 0	11. 43	·0875					
12. 7	10. 0	11. 55	·0880					
12. 18	5. 45	12. 20	·0882					
12. 45	11. 0	12. 53	·0908					
12. 50	10. 0	13. 12	·0894					
13. 2	13. 10	13. 35	·0895					
13. 41	3. 0		***					
13. 51	3. 20	14. 7	·0884					
13. 54	2. 50	14. 16	·0882					
14. 15	13. 5	14. 55	·0900					
14. 28	10. 10	15. 8	·0894					
14. 41	10. 50	15. 33	·0891					
14. 50	9. 20	16. 5	·0898					
15. 8	10. 20	16. 37	·0900					
15. 43	6. 10	16. 58	·0892					
15. 56	7. 10	17. 50	·0901					
16. 1	6. 40	18. 1	·0895					
16. 12	7. 10	18. 25	·0897					
16. 29	6. 20	18. 54	·0894					
17. 25	11. 0	20. 11	·0906					
17. 48	8. 40	22. 15	·0871					
17. 58	10. 0		***					
18. 11	7. 40	23. 15	·0867					
18. 25	7. 0	23. 35	·08[illegible]					
18. 54	8. 45	23. 54	·0866					
19. 4	8. 0	23. 59	·0863					
19. 18	10. 15							
19. 40	8. 30							
20. 13	10. 0							
20. 59	7. 45							
	***							
22. 21	11. 30							
23. 11	16. 45							
23. 27	15. 15							
23. 59	17. 10							
Apr.12		Apr.12		Apr.12		Apr.12		
0. 0	21. 17. 10	0. 0	·0863	0. 0	·00929	0. 0	49·8	50·3
0. 13	17. 50	1. 24	·0858	3. 15	·00707	1. 0	51·4	51·3
0. 25	16. 55	2. 25	·0886	5. 42	·00970	3. 0	53·8	53·5
0. 52	20. 0		***	8. 43	·01113	9. 3	53·7	53·8
1. 55	20. 40	3. 23	·0895	10. 27	·01067	21. 0	46·6	48·3
2. 19	18. 10	3. 45	·0888	11. 59	·01075			
2. 30	19. 0	3. 56	·0896	12. 43	[illegible]			
3. 7	17. 30	4. 13	·0896	13. 22	·01044			
3. 28	19. 10	4. 25	·0918	16. 10	·01327			
3. 43	17. 0	4. 50	·0920	20. 10	·01500			
3. 54	17. 10	5. 6	·0902	22. 45	·01717			
4. 15	13. 20	5. 17	·0905	23. 59	·01648			
4. 24	13. 45	5. 45	·0891					
4. 39	12. 20		***					
4. 54	14. 0	6. 40	·0884					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
Apr. 12		Apr. 12							Apr. 13		Apr. 13		Apr. 13				
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
5. 13	21. 9. 50	7. 0	·0888						2. 2	21. 21. 0	3. 15	·0870	11. 0	·01095			
5. 34	13. 20	7. 31	·0884						2. 25	22. 20	3. 25	·0867	12. 5	·01107			
5. 51	12. 30	7. 55	·0893						2. 43	20. 30	3. 55	·0890	12. 45	·01150			
5. 58	12. 40	8. 14	·0877						2. 53	22. 30	4. 46	·0891	13. 21	·01143			
6. 13	10. 40	8. 25	·0881						3. 15	20. 0	5. 26	·0896	13. 37	·01070			
6. 45	11. 40	8. 40	·0874						3. 39	19. 0	5. 49	·0881	15. 11	·01252			
7. 11	13. 10	9. 21	·0894						3. 59	14. 30	6. 10	·0896	15. 19	·01222			
7. 29	11. 50	9. 29	·0893						4. 43	13. 40	6. 27	·0910	15. 29	·01247			
7. 45	11. 50	9. 50	·0906						5. 0	16. 10	6. 36	·0907	16. 5	·01094			
8. 7	18. 10	10. 0	·0905						5. 46	14. 50	6. 43	·0892	16. 11	·01111			
8. 22	15. 20	10. 15	·0896						5. 56	11. 50	6. 54	·0908	16. 22	·01069			
8. 30	16. 15	10. 27	·0899						6. 13	13. 20	7. 8	·0891	16. 57	·01152			
9. 13	7. 5	10. 52	·0890						6. 44	11. 20	7. 24	·0884	19. 16	·01679			
9. 28	9. 30	11. 10	·0897						6. 57	4. 50	7. 45	·0895	21. 19	·01905			
9. 31	8. 15	11. 28	·0881						7. 5	7. 50	8. 8	·0881	23. 15	·01830			
10. 11	13. 25	11. 57	·0870						7. 13	5. 10	8. 30	·0888	23. 32	·01758			
10. 41	10. 50	12. 9	·0882						7. 27	6. 0	8. 51	·0868	23. 48	·01749			
10. 58	7. 20	12. 15	·0878						7. 41	3. 50	9. 16	·0882		(†)			
11. 10	21. 8. 0	12. 21	·0882						8. 10	11. 20	9. 21	·0880					
11. 44	20. 58. 10	12. 30	·0876						8. 23	9. 0	9. 35	·0900					
11. 49	21. 0. 10	12. 38	·0878						8. 44	12. 0	10. 0	·0862					
12. 6	20. 59. 0	12. 50	·0862						9. 12	6. 30	10. 9	·0850					
	(†)	13. 11	·0892						9. 30	10. 30	10. 30	·0906					
13. 7	21. 1. 50	13. 25	·0869						9. 40	9. 0	10. 53	·0872					
13. 25	0. 20	13. 48	·0886						9. 47	14. 30		***					
13. 42	21. 5. 40	14. 22	·0880						10. 0	21. 17. 0	11. 26	·0890					
14. 6	20. 53. 20	14. 40	·0886						10. 30	20. 50. 0	11. 41	·0890					
15. 5	21. 8. 30		***						10. 44	21. 8. 0	11. 52	·0878					
15. 29	8. 40	15. 40	·0883						10. 51	10. 10	12. 15	·0870					
15. 40	7. 40	16. 7	·0890						11. 6	5. 30	12. 51	·0874					
16. 11	11. 10	16. 34	·0888						11. 25	3. 20	13. 25	·0866					
16. 38	11. 50		***						11. 31	5. 25	13. 41	·0888					
16. 57	11. 0	17. 5	·0878						11. 50	4. 50	14. 0	·0874					
17. 18	12. 20		***						11. 58	3. 5	14. 8	·0874					
17. 42	11. 0	18. 51	·0896						12. 26	2. 20	14. 14	·0862					
18. 27	19. 20		***						12. 44	5. 0	14. 39	·0876					
18. 43	16. 30	19. 47	·0880						13. 0	4. 30	14. 50	·0876					
18. 57	14. 30	19. 59	·0882						13. 27	15. 30	15. 11	·0898					
19. 37	14. 20	20. 20	·0863						14. 15	6. 30	15. 24	·0881					
20. 13	10. 40		(†)						14. 39	4. 20	15. 34	·0900					
20. 30	12. 30	21. 0	·0868						14. 42	21. 5. 10	15. 55	·0833					
20. 44	11. 30								15. 6	20. 58. 40	16. 10	0890					
20. 59	13. 25								15. 10	21. 6. 0	16. 20	·0878					
21. 30	13. 0								15. 39	20. 53. 55	16. 34	·0912					
22. 52	14. 50								15. 42	57. 0	16. 51	·0931					
23. 26	17. 20								15. 44	20. 56. 30	17. 11	·0867					
23. 45	21. 30								15. 55	21. 11. 0	17. 31	·0900					
23. 55	21. 30								16. 0	10. 20	18. 15	·0871					
23. 59	21. 10								16. 10	13. 10		***					
									16. 29	0. 30	18. 50	·0864					
Apr. 13		Apr. 13		Apr. 13		Apr. 13			16. 42	20. 45		***					
0. 0	21. 21. 10		(†)	0. 0	·01648	1. 0	51 ·3	51 ·8	16. 47	20. 5	19. 20	·0869					
0. 14	18. 55	0. 3	·0852	4. 18	·01408	3. 0	53 ·3	53 ·8	16. 51	22. 30	19. 48	·0860					
0. 51	19. 35	1. 48	·0866	8. 45	·01145	9. 0	54 ·0	54 ·0	16. 57	20. 0	20. 3	·0866					
0. 59	20. 55	2. 15	·0878	9. 41	·01152	21. 0	44 ·8	47 ·0	17. 0	20. 45		***					
1. 6	19. 45	2. 38	·0872	9. 56	·01102				17. 28	8. 40	20. 30	·0854					
1. 13	21. 30	2. 46	·0880	10. 16	·01090				17. 35	10. 30	21. 15	·0852					
1. 48	21. 40	3. 5	·0864	10. 30	·01132				17. 39	10. 10	21. 27	·0845					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 13		Apr. 13						
h m	° ′ ″	h m		h m		h m	°	°
17. 45	21. 14. 0	21. 35	·0823					
17. 54	9. 50	21. 55	·0838					
18. 0	15. 5	22. 10	·0834					
18. 12	14. 55	22. 40	·0843					
18. 21	12. 30	22. 55	·0836					
18. 29	14. 20	23. 5	·0842					
18. 38	11. 10	23. 17	·0820					
18. 44	14. 0	23. 34	·0838					
19. 16	12. 45	23. 39	·0831					
19. 27	13. 50	23. 59	·0850					
19. 47	14. 0							
19. 54	12. 50							
20. 0	14. 30							
20. 6	13. 10							
20. 11	15. 0							
20. 14	13. 15							
20. 19	14. 50							
20. 23	13. 55							
20. 29	14. 50							
21. 28	15. 40							
21. 39	8. 0							
21. 58	18. 30							
	***							
22. 30	17. 30							
22. 52	19. 0							
23. 11	17. 0							
23. 15	18. 5							
23. 23	16. 0							
23. 29	20. 10							
	***							
23. 50	19. 50							
23. 59	20. 55							
Apr. 14		Apr. 14		Apr. 14		Apr. 14		
0. 0	21. 20. 55	0. 0	·0850		(†)	1. 0	48·8	49·0
0. 15	20. 0		(†)	0. 23	·01772	3. 0	51·3	51·7
0. 19	20. 30	1. 0	·0868*	5. 55	·01428	9. 0	49·4	51·0
0. 39	18. 0	2. 30	·0854	6. 43	·01440	21. 5	46·0	48·0
2. 14	17. 0	2. 53	·0866	8. 45	·01372			
2. 20	17. 50	3. 0	·0862	14. 56	·01470			
2. 30	15. 0	3. 15	·0872	19. 24	·01752			
2. 37	15. 30	3. 22	·0881	23. 59	·01546			
2. 42	14. 50	3. 30	·0871					
2. 51	16. 0	3. 37	·0876					
3. 9	14. 0	3. 50	·0890					
3. 21	10. 45		***					
3. 39	12. 0	4. 15	·0881					
3. 54	10. 25	4. 26	·0892					
4. 21	12. 15	4. 32	·0883					
5. 0	11. 30	4. 40	·0890					
5. 21	12. 30	5. 3	·0900					
5. 58	7. 0	5. 42:	·0885					
6. 11	7. 30	6. 15	·0893					
6. 28	4. 0		***					
6. 43	10. 0	6. 45	·0883					
6. 54	10. 25	7. 4	·0904					
7. 11	9. 30	7. 13	·0900					
7. 19	10. 20	7. 36	·0922					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 14		Apr. 14						
h m	° ′ ″	h m		h m		h m	°	°
7. 27	21. 10. 0	7. 48	·0907					
7. 39	12. 10	7. 52	·0909					
7. 45	10. 30	8. 0	·0903					
8. 19	10. 20	8. 10	·0905					
8. 42	13. 10	8. 21	·0898					
8. 54	12. 50		***					
9. 4	13. 35	8. 36	·0903					
9. 30	12. 40	8. 45	·0900					
10. 2	16. 30		***					
10. 36	14. 50	9. 0	·0906					
10. 45	16. 50	9. 10	·0901					
11. 6	16. 20	9. 17	·0904					
11. 27	14. 0	9. 36	·0891					
11. 44	13. 45	9. 51	·0896					
12. 31	11. 30		***					
	(†)	11. 0	·0884					
14. 14	13. 20	11. 15	·0887					
14. 37	15. 5	11. 36	·0885					
14. 52	14. 40	13. 0	·0899					
15. 5	16. 25	13. 32:	·0884					
15. 54	11. 0	13. 51	·0899					
16. 11	11. 10	14. 10	·0883					
16. 45	14. 30	14. 56:	·0895					
17. 21	13. 45	15. 17	·0890					
18. 11	9. 50	15. 33	·0892					
18. 31	9. 50	16. 24	·0881					
18. 50	7. 30	16. 53	·0884					
18. 55	8. 0	17. 22	·0895					
19. 2	7. 0		***					
19. 13	8. 0	18. 4	·0888					
19. 26	6. 30	18. 27	·0893					
19. 54	8. 40		***					
20. 18	7. 30	19. 38	·0885					
21. 12	13. 20		***					
22. 11	13. 40	20. 0	·0871					
23. 1	18. 0		***					
23. 20	21. 10	20. 52	·0865					
23. 59	23. 30		***					
		22. 47	·0863					
		23. 30	·0861					
		23. 59	·0856					
Apr. 15		Apr. 15		Apr. 15		Apr. 15		
0. 0	21. 23. 30	0. 0	·0855	0. 0	·01546	6. 45	55·0	55·3
0. 15	22. 30	0. 20	·0851	1. 39	·01478	21. 0	55·6	52·7
1. 3	24. 0	1. 17	·0871	6. 4	·01025			
2. 36	18. 45	2. 38	·0875	8. 52	·00867			
3. 12	18. 0	3. 15	·0882	13. 11	·00840			
3. 24	16. 30	3. 40	·0879	15. 17	·00884			
3. 51	16. 0	4. 10	·0882	16. 44	·00865			
4. 41	11. 20	4. 33	·0878	18. 7	·00970			
7. 13	12. 40	5. 7	·0903	22. 50	·01144			
7. 28	11. 45	5. 30	·0891	23. 59	·01122			
7. 46	12. 0	5. 50	·0886					
8. 19	10. 20		***					
8. 43	13. 30	8. 26	·0890					
8. 56	7. 30	8. 40	·0893					
9. 5	8. 0	8. 52	·0883					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.15		Apr.15						
h m	° ′ ″	h m		h m		h m	°	°
9. 21	21. 6. 35	9. 7	·0890					
9. 37	7. 40	9. 24	·0885					
9. 46	7. 0	9. 40	·0892					
11. 15	8. 0		***					
11. 40	10. 0	10. 22	·0883					
12. 16	11. 20		***					
12. 47	13. 40	11. 17	·0883					
12. 59	13. 5	11. 33	·0881					
13. 21	14. 40	11. 45	·0884					
14. 28	13. 45	12. 3	·0882					
15. 6	10. 30	12. 30	·0885					
15. 26	15. 10	12. 50	·0893					
15. 45	12. 35	13. 21	·0886					
16. 11	15. 45	13. 52	·0894					
17. 13	7. 30	14. 17	·0892					
	***	14. 47	·0896					
19. 14	9. 30	15. 21	·0895					
19. 43	8. 20	15. 46	·0887					
19. 51	10. 20	16. 3	·0892					
20. 10	9. 40	16. 37	·0891					
20. 14	11. 30	16. 51	·0887					
20. 29	11. 20	17. 38	·0894					
20. 44	13. 0	18. 43	·0893					
21. 13	11. 30	19. 23	·0877					
23. 59	23. 0	19. 45	·0874					
		20. 0	·0877					
		20. 22	·0868					
		20. 40	·0871					
		21. 17	·0864					
		21. 33	·0865					
		22. 10	·0854					
		22. 26	·0855					
		22. 40	·0860					
		22. 51	·0860					
			***					
		23. 20	·0854					
		23. 43	·0852					
		23. 59	·0859					
Apr.16		Apr.16		Apr.16		Apr.16		
0. 0	21. 23. 0	0. 0	·0859	0. 0	·01122	1. 0	53·0	54·0
0. 36	24. 45		***	1. 51	·01078	3. 0	57·0	57·7
0. 57	25. 15	2. 13	·0869	4. 52	·00790	9. 0	58·3	58·5
1. 7	24. 30	2. 36	·0879	8. 41:	·01192	21. 0	49·0	50·0
1. 28	25. 0		***	9. 45	·01165			
2. 48	20. 5	3. 37	·0870	14. 10:	·01405			
3. 5	20. 0	3. 46	·0866	20. 59	·02085			
3. 40:	17. 30	4. 30	·0886	23. 59	·01888			
3. 58	18. 30	4. 36	·0884					
4. 22	15. 30	4. 49	·0900					
4. 30	11. 30	5. 7	·0910					
4. 40	13. 45	5. 50	·0881					
4. 46	11. 10	6. 56	·0870					
4. 58	13. 25	7. 47	·0866					
5. 10	12. 55	8. 17	·0869					
5. 20	13. 30	8. 40	·0864					
5. 45	13. 0	8. 52	·0864					
6. 22	10. 30	9. 10	·0876					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.16		Apr.16						
h m	° ′ ″	h m		h m		h m	°	°
7. 27	21. 11. 15	9. 25	·0867					
7. 55	10. 30	9. 33	·0879					
8. 21	11. 20	9. 45	·0870					
8. 36	10. 10	9. 51	·0872					
8. 58	9. 0	10. 2	·0867					
9. 15	12. 0	10. 30	·0875					
9. 46	8. 30	10. 45	·0871					
9. 53	10. 20		***					
10. 11	7. 10	11. 20	·0875					
10. 58	12. 20	11. 45	·0874					
11. 52	13. 5	12. 6	·0877					
12. 3	12. 30	12. 24	·0877					
13. 12	12. 30		***					
13. 29	11. 30	14. 17	·0885					
13. 32	12. 30	14. 46	·0879					
13. 46	11. 30	15. 20	·0877					
14. 11	11. 50	15. 46	·0883					
14. 22	10. 50	16. 36	·0884					
15. 28	12. 0	17. 15	·0889					
15. 53	10. 45	17. 40	·0889					
16. 30	13. 20	18. 10	·0883					
17. 26	10. 50	18. 22	·0886					
17. 53	6. 20	18. 43	·0883					
18. 28	10. 45	19. 3:	·0874					
19. 2	7. 0	19. 34	·0877					
19. 30:	10. 40	20. 13	·0866					
20. 10	8. 20	20. 24	·0868					
20. 52	10. 0	20. 53	·0866					
21. 13	12. 20		***					
21. 52	13. 40	22. 2	·0848					
23. 0	18. 40		***					
23. 59	18. 30	22. 50	·0851					
		23. 10	·0857					
		23. 59	·0851					
Apr.17		Apr.17		Apr.17		Apr.17		
0. 0	21. 18. 30	0. 0	·0851	0. 0	·01888	1. 0	54·8	55·0
1. 0	19. 30		***	0. 56	·01832	3. 0	58·0	58·0
3. 35	14. 30	2. 50	·0868	6. 27	·01111	9. 0	58·3	57·8
5. 4	11. 30	3. 4	·0873	8. 27	·01288	21. 0	49·0	50·0
7. 2	10. 20	3. 22	·0868	11. 42	·01366			
9. 28	11. 30		***	20. 5	·02100			
9. 43	10. 20	4. 28	·0870	21. 28	·02167			
9. 59	10. 20	4. 47	·0875	23. 59	·01997			
10. 13	9. 0	5. 18	·0875					
10. 24	9. 30	5. 52:	·0880					
10. 57	5. 50	6. 39	·0875					
11. 32	6. 10	6. 45	·0868					
11. 54	8. 0	7. 7	·0869					
12. 7	10. 50	7. 36	·0874					
12. 17	9. 50	9. 0	·0872					
12. 39	10. 15	9. 30	·0875					
12. 55	8. 50	9. 50	·0872					
14. 43	11. 10	10. 10	·0878					
15. 22	9. 15	10. 28	·0882					
16. 36	11. 10	10. 53	·0881					
18. 0	10. 10	11. 6	·0883					
18. 40	5. 30		***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.17		Apr.17						
h m	° ′ ″	h m		h m		h m	°	°
19.11	21. 6.55	11.28	·0876					
19.42	10.10	11.38	·0878					
20.43	8. 0	11.54	·0871					
22.42	14. 0	12.38	·0887					
23. 2	17.10	12.51	·0882					
23.14	16.20		***					
23.37	17.20	17.38	·0895					
23.59	17. 0	18.51	·0891					
		19.38	·0879					
		20.10	·0881					
		22.42	·0863					
		22.51	·0863					
		23. 2	·0870					
		23.20	·0858					
		23.36	·0861					
		23.59	·0859					
Apr.18		Apr.18		Apr.18		Apr.18		
0. 0	21.17. 0	0. 0	·0859	0. 0	·01997	0. 0	53·2	53·8
0.40	19.30	0.40	·0872	1.41	·01865	1. 0	55·0	55·1
0.55	17.35	0.52	·0864	4.41	·01447	3. 0	59·0	58·4
1.47	22. 0	1.10	·0870	6.42	·01285	6. 0	59·0	58·0
2.29	16.50	1.28	·0870	8.57	{ ·01300	9.16	56·0	56·3
3. 5	19. 5	1.50	·0880		·01354	12. 0	53·2	54·0
	***	2. 2	·0880	9.52	·01347	18. 0	46·8	49·3
4.13	15.30	2.28	·0859	11.44	·01450	21. 0	47·0	49·0
5.54	14.30	3.20	·0878	19.57	·02186			
6.55	12.40	3.45	·0877	22.38	·01927			
8.29	13. 5	4.24	·0868		(†)			
9.10	10.30	4.52	·0874					
10. 0	13.20	5. 8	·0872					
10.30	2.45	6.20	·0882					
10.44	5.20		***					
10.54	5. 0	7.16	·0877					
11.11	7.25		***					
11.20	5.20	8.38	·0887					
11.30	21. 7.40	9. 3:	·0882					
12. 2	20.59. 0	9.45	·0912					
14.53	21.10.30	10.11	·0869					
15.28	12.45	10.36	·0888					
16.15	11.30		***					
16.53	11.50	10.53	·0887					
17. 7	10.10	11.10	·0876					
17.41	11.30	11.23	·0884					
18.21	8.20	11.54	·0898					
19.12	10. 0	12.45:	·0874					
19.25	11.20	13.36	·0883					
20.58	7. 0		***					
23. 0	16. 0	14.57	·0885					
23.11	15.50		***					
23.45	17. 0	16.15	·0895					
	(†)		***					
		18.37	·0895					
		18.52	·0890					
		19.10	·0893					
		20.20	·0896					
		20.45	·0891					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Apr.18						
h m	° ′ ″	h m		h m		h m	°	°
		21. 4	·0893					
			***					
		22. 9	·0869					
		22.50:	·0877					
		23.10	·0870					
		23.59	·0878					
Apr.19		Apr.19		Apr.19		Apr.19		
1. 0	21.22.42*	0. 0	·0879	1. 0	·01674*	0. 0	49·0	49·7
3. 0	20.29*	1. 0	·0881*	3. 0	·01607*	1. 0	49·8	50·0
9. 0	14.17*	3. 0	·0896*	9. 0	·01457*	3. 0	51·4	51·8
21. 0	9.15*	9. 0	·0901*	21. 0	·01518*	9. 0	50·0	51·8
		21. 0	·0880*			21. 0	46·0	47·0
Apr.20		Apr.20		Apr.20		Apr.20		
	(†)		(†)		(†)	1. 0	50·3	51·0
0.12	21.21.50	0.38	·0871	0.15	·01287	3. 0	53·0	53·0
0.41	26. 0	1.40	·0877	3. 4	·01108	9. 0	54·0	53·7
2.17	25.45		***	9.30:	·00705	21. 0	44·8	46·3
2.29	24.55	3.20	·0900	20.58	·01433			
2.50	24.55	4. 0:	·0891	23.59	·01267			
3.37	17.40	4.26	·0897					
4. 0	17. 0	4.45	·0896					
4.26	18.35	5. 7	·0899					
4.58	17.30	6.15	·0888					
5.28	15.25	6.38	·0896					
6. 7	14. 0	6.53	·0892					
6.29	10. 0	7. 6	·0884					
6.44	10.40	7.30	·0882					
7. 5	9.20	7.45	·0885					
7.17	12. 0	8. 8	·0883					
7.38	12. 0		***					
9.25	15. 0	9.28	·0894					
9.44	14. 0		***					
10. 2	14. 0	10.27	·0895					
11. 1	5.15	10.40	·0892					
12.13	13. 5	10.56	·0897					
12.59	15.40	11. 9	·0897					
14.17	15.40	11.46	·0886					
14.44	14.30	12.30	·0889					
15.11	15.30	12.46	·0894					
17.44	13.55		***					
20. 0	6.50	15. 6	·0894					
20.10	7.10	16.22	·0901					
20.18	6.20	17.24	·0898					
22. 9	11. 0	17.53	·0899					
23.59	19.40	19.13	·0896					
		20.32	·0888					
		22.36	·0871					
		23.10	·0870					
		23.30	·0872					
		23.42	·0870					
		23.52	·0873					
		23.59	·0872					
Apr.21		Apr.21		Apr.21		Apr.21		
0. 0	21.19.40	0. 0	·0872	0. 0	·01267	1. 0	49·0	50·0
0.37	21.20	0.15	·0871	3.45	·00974	3. 0	52·0	52·4

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

April 19. The Photographic Traces for the Declination, Horizontal Force, and Vertical Force Magnets were too faint for use.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.21		Apr.21		Apr.21		Apr.21		
h m	° ′ ″	h m		h m		h m	°	°
0. 54	21. 22. 10	0. 50	·0874	9. 10:	·00600	9. 0	53·0	53·0
1. 44	22. 50	1. 4	·0873	14. 0	·00707	22. 25	44·5	46·0
2. 52	20. 45	5. 7	·0900	19. 11	·01172			
3. 26	17. 10	5. 40	·0889	21. 26	·01342			
4. 14	15. 45	6. 46	·0899	23. 59	·01193			
4. 51	13. 20	6. 58	·0897					
5. 11	14. 30	7. 16	·0897					
5. 28	13. 25	7. 36	·0894					
7. 5	12. 15	8. 8	·0902					
7. 21	13. 0	8. 30	·0895					
8. 0	10. 20	9. 10	·0897					
8. 27	11. 10	9. 32:	·0895					
8. 45	10. 5	10. 13	·0901					
9. 26	12. 40	11. 3:	·0899					
9. 54	12. 0	11. 33	·0901					
12. 7	16. 20	11. 46	·0901					
12. 45	13. 45	11. 55	·0905					
13. 11	13. 40		***					
13. 42	18. 0	12. 50	·0902					
14. 26	14. 10	13. 36	·0907					
14. 57	13. 20		***					
15. 37	16. 0	14. 47	·0902					
	***	15. 13:	·0895					
17. 11	12. 55	15. 46	·0902					
17. 26	13. 30	15. 58	·0897					
17. 37	11. 40		***					
18. 12	10. 45	18. 6	·0907					
18. 26	9. 20	18. 43	·0902					
18. 30	9. 35	18. 54	·0902					
18. 38	8. 45	19. 42:	·0887					
18. 44	10. 50	20. 28	·0891					
18. 51	9. 0	20. 52:	·0888					
18. 56	10. 0	21. 17	·0891					
19. 9	8. 50	22. 33	·0878					
19. 16	10. 50		(†)					
19. 28	10. 0							
19. 43	11. 0							
19. 56	10. 20							
20. 12	11. 15							
21. 0	7. 20							
21. 17	9. 30							
23. 59	18. 10							
Apr.22		Apr.22		Apr.22		Apr.22		
0. 0	21. 18. 10	8. 0	·0902*	0. 0	·01193	8. 0	49·6	51·0
1. 11	21. 0	21. 0	·0880*	2. 0	·01200	21. 0	44·0	45·3
2. 26	20. 30			11. 11:	·00792			
4. 53	14. 30			19. 42	·01257			
5. 35	13. 40			19. 57	·01200			
6. 10	11. 20			22. 0	·01200			
6. 43	12. 30			23. 59	·01093			
12. 48	14. 0							
13. 19	15. 30							
14. 7	14. 30							
16. 23	14. 40							
16. 54	13. 25							
18. 30	11. 35							
18. 44	10. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.22								
h m	° ′ ″	h m		h m		h m	°	°
19. 25	21. 9. 20							
20. 5	6. 30							
20. 12	7. 0							
20. 30	6. 15							
21. 40	12. 50							
21. 54	12. 50							
23. 59	20. 45							
Apr.23		Apr.23		Apr.23		Apr.23		
0. 0	21. 20. 45	0. 0	·0866	0. 0	·01093	1. 0	49·0	50·0
0. 27	23. 0	0. 13	·0868	9. 52:	·00375	3. 0	52·0	52·7
0. 52	22. 50	0. 27	·0863	20. 36	·00830	9. 0	54·0	53·5
4. 40	15. 20	0. 46	·0865	23. 59	·00970	21. 0	46·0	48·0
8. 10	13. 15	1. 20	·0866					
8. 39	11. 50	2. 28	·0877					
9. 52	14. 30	4. 15	·0885					
10. 54	15. 0	4. 46	·0879					
11. 36	11. 45	5. 10	·0884					
12. 38	13. 30	5. 53	·0884					
14. 52	14. 10	6. 13	·0888					
15. 15	13. 30	6. 39	·0887					
16. 14	16. 30	7. 0	·0885					
16. 27	16. 0	7. 22	·0885					
16. 43	16. 40	7. 43	·0890					
18. 27	11. 45	8. 5	·0886					
18. 43	13. 0	8. 16	·0886					
19. 12	11. 20	8. 38	·0881					
	***	9. 5	·0887					
20. 10	9. 45	9. 22	·0885					
20. 36	10. 0	10. 20	·0888					
21. 25	11. 40	10. 43	·0887					
22. 11	15. 45	11. 16	·0892					
23. 45	20. 30	11. 58	·0893					
	(†)	13. 15	·0890					
		15. 58	·0896					
		16. 22	·0895					
		17. 38	·0902					
		21. 50	·0867					
		22. 30	·0876					
		23. 7	·0873					
		23. 26	·0866					
		23. 59	·0861					
Apr.24		Apr.24		Apr.24		Apr.24		
	(†)	0. 0	·0861	0. 0	·00970	1. 0	47·6	48·4
0. 13	21. 20. 50	1. 5	·0871	2. 13	·01003	3. 0	49·0	50·0
1. 36	21. 15	2. 10	·0883	8. 30	·00908	9. 0	50·0	50·7
4. 35	16. 0	4. 30	·0893	17. 12	{ ·01130	21. 0	46·5	47·3
6. 55	13. 45		***		·01088			
7. 42	14. 50	11. 6	·0899	21. 22	·01157			
14. 5	14. 35	11. 52	·0903	23. 59	·01053			
14. 55	15. 45	12. 34	·0899					
15. 56	14. 45	13. 47	·0904					
16. 58	15. 5	14. 8	·0903					
19. 23	10. 30	15. 26	·0910					
19. 30	11. 20	16. 52	·0908					
19. 58	8. 30	17. 56	·0911					
20. 12	10. 20	19. 50	·0900					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

April 22. The Photographic Trace for the Horizontal Force Magnet was too faint for use.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Apr.24		Apr.24						
h m	° ′ ″	h m		h m		h m	°	°
21. 55	21. 13. 20	21. 38	·0874					
23. 15	18. 15	23. 59	·0865					
	(†)							
Apr.25		Apr.25		Apr.25		Apr.25		
	(†)	0. 0	·0865	0. 0	·01053	0. 0	49 ·0	49 ·7
3. 0	21. 31. 45	0. 33	·0872	1. 40	·00937	1. 0	51 ·0	51 ·3
5. 40	24. 15	3. 0	·0885	6. 54	·00360	3. 0	54 ·0	54 ·0
8. 9	21. 55	3. 6	·0887	9. 9	·00612	6. 0	57 ·0	58 ·0
8. 43	22. 20	3. 22	·0880	13. 26	·00775	9. 0	56 ·0	56 ·8
8. 59	23. 45	3. 47	·0878	21. 12	·01205	12. 0	54 ·0	54 ·5
14. 19	23. 40		***	23. 59	·01250	18. 0	49 ·0	51 ·0
14. 30	25. 0	6. 14	·0885			21. 10	48 ·0	50 ·0
14. 45	24. 0	7. 18	·0881					
14. 54	25. 0	7. 30	·0886					
15. 10	24. 0	8. 3	·0884					
16. 0	26. 10		***					
16. 29	23. 0	8. 42	·0888					
17. 16	22. 50	9. 43	·0884					
17. 35	20. 5	10. 8	·0890					
	***		***					
18. 15	22. 10	12. 45	·0890					
18. 44	21. 30		***					
18. 56	22. 30	16. 16	·0899					
19. 10	21. 30		***					
19. 18	21. 20	19. 40	·0893					
20. 11	17. 30		***					
20. 30	18. 20	22. 17	·0862					
20. 54	18. 0		***					
21. 12	19. 45	23. 32	·0857					
22. 30	24. 40	23. 59	·0875					
23. 17	29. 55							
23. 59	31. 0							
Apr.26		Apr.26		Apr.26		Apr.26		
0. 0	21. 31. 0	0. 0	·0875	0. 0	·01250	0. 0	50 ·0	51 ·2
0. 29	33. 30		***	2. 43	·01170	1. 0	51 ·0	52 ·0
2. 30	31. 50	0. 58	·0856	4. 56	·00990	3. 0	53 ·3	54 ·0
4. 10	25. 5	2. 37	·0888	10. 17:	·00864	9. 0	54 ·0	54 ·4
6. 2	19. 20	3. 17	·0880	15. 0	·01035	21. 0	49 ·0	49 ·6
6. 54	20. 40	3. 53	·0880	21. 51	·01420			
7. 21	19. 10	4. 35	·0898	23. 59	·01350			
7. 56	19. 30	4. 52	·0884					
8. 28	17. 25	5. 30	·0897					
9. 41	22. 0	6. 20	·0879					
9. 54	21. 30	6. 47	·0894					
10. 13	22. 40	7. 7	·0884					
10. 29	20. 50	7. 53	·0886					
10. 44	22. 20	8. 36	·0872					
11. 9	21. 0	10. 15	·0885					
11. 43	22. 50	11. 0	·0880					
13. 55	25. 30		***					
14. 10	24. 0	12. 21	·0890					
14. 24	25. 30	13. 10	·0886					
14. 41	23. 50		***					
14. 57	27. 55	14. 35	·0896					
15. 31	22. 0	14. 44	·0892					
16. 45	20. 50	15. 6	·0901					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Apr.26		Apr.26						
h m	° ′ ″	h m		h m		h m	°	°
17. 31	21. 25. 20	15. 40	·0867					
18. 12	21. 50		***					
19. 7	19. 20	16. 30	·0899					
19. 38	18. 20	17. 7:	·0881					
20. 12	15. 30	18. 23	·0899					
20. 25	18. 30	20. 17	·0890					
21. 11	20. 30	21. 43	·0865					
21. 57	24. 10	23. 20	·0877					
22. 45	23. 15	23. 59	·0866					
23. 16	26. 30							
23. 59	27. 0							
Apr.27		Apr.27		Apr.27		Apr.27		
0. 0	21. 27. 0	0. 0	·0866	0. 0	·01350	1. 0	52 ·5	52 ·8
1. 56	26. 40	2. 22	·0877	6. 46	·00685	3. 0	55 ·5	55 ·2
3. 11	23. 15	2. 46	·0881	12. 11	·00855	9. 0	57 ·0	57 ·0
3. 52:	18. 0	3. 40	·0885	21. 22	·01639	21. 0	48 ·0	48 ·8
8. 23	18. 30	4. 17	·0884	23. 59	·01580			
10. 13	21. 5	5. 40	·0885					
14. 36	22. 0	6. 41	·0882					
14. 38	23. 0	7. 17	·0884					
15. 52	22. 10	7. 52	·0880					
16. 11	24. 0	9. 28	·0881					
16. 29	23. 55	9. 46	·0880					
18. 0	20. 0	14. 25	·0893					
18. 50	20. 0	14. 40	·0896					
19. 8	18. 45		***					
20. 27	18. 30	15. 50	·0898					
22. 15	21. 45	16. 7	·0896					
23. 55	26. 0	17. 17:	·0901					
	(†)	19. 14	·0896					
		21. 33	·0876					
		21. 44	·0876					
		23. 3	·0869					
		23. 47	·0872					
Apr.28		Apr.28		Apr.28		Apr.28		
1. 0	21. 30. 41*	1. 0	·0872*	1. 0	·01537*	1. 0	52 ·0	52 ·7
3. 0	26. 9*	3. 0	·0873*	3. 0	·01280*	3. 0	55 ·8	56 ·0
9. 0	15. 53*	9. 0	·0892*	9. 0	·00782*	9. 0	58 ·5	57 ·8
22. 20	21. 6*	22. 20	·0870*	22. 20	·01707*	22. 20	49 ·0	51 ·0
Apr.29		Apr.29		Apr.29		Apr.29		
9. 22	21. 21. 26*	9. 22	·0896*	0. 0	·01638	9. 22	58 ·0	61 ·0
21. 0	17. 10*	21. 0	·0880*	1. 48	·01497	21. 0	52 ·3	53 ·8
				6. 9	·00848			
				6. 48	·00935			
				10. 22	·01057			
				16. 27	·01411			
				21. 6	·01811			
				23. 59	·01820			
Apr.30		Apr.30		Apr.30		Apr.30		
	(†)	1. 0	·0880*	1. 0	·01767*	1. 0	58 ·0	58 ·3
0. 58	21. 29. 0	3. 0	·0870*	3. 0	·01479*	3. 0	61 ·3	61 ·8
1. 10	28. 10	9. 0	·0885*	9. 0	·01245*	9. 0	64 ·7	64 ·5
1. 14	29. 10	21. 0	·0877*	21. 0	·01699*	21. 0	55 ·0	56 ·0
1. 28	27. 20							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

April 28 and 29. The Photographic Traces for the Declination Magnet were too faint for use.
April 28, 29, and 30. The Photographic Traces for the Horizontal Force Magnet were too faint for use.
April 28 and 30. The Photographic Traces for the Vertical Force Magnet were too faint for use.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 30								
h m	° ′ ″	h m		h m		h m	°	°
1.43	21.28. 0							
2.30	24. 0							
2.45	24. 5							
3. 1	20.50							
3.30	19.20							
3.43	20. 0							
4.58	18. 0							
5.14	18.30							
5.39	16.35							
6.54	16.30							
7. 9	15.30							
8. 4	14.10							
9.10	17.30							
9.35	19.35							
10. 9	18.20							
12.22	20.45							
13. 0	20. 0							
	(†)							
21. 0	21.14*							
May 1		May 1		May 1		May 1		
	(†)	1. 0	·0867*		(†)	1. 0	60·3	60·0
0.52	21.23.30	3. 0	·0872*	1. 0	·01340	3. 0	63·0	62·3
2. 6	23.50	9. 0	·0883*	6.52	·00549	9. 0	64·5	64·0
3.13	21.10	21. 0	·0878*	8.52	{·00727 ·00880	21. 0	56·3	56·2
3.30	21.20							
3.43	20.25			11. 7	·00904			
3.45	21.20			14.32	·01183			
4.10	19.25			19.27	·01627			
6. 7	17.20			23. 0	·01274			
7.48	16.30				(†)			
8.30	11.50							
8.43	12.30							
8.57	11.55							
9.50	17.10							
10.13	16.50							
10.54	18.35							
11.28	17.45							
13.31	18. 0							
13.51	19.15							
14.28	18.10							
15.14	19.55							
16.27	17.20							
18.36	15.10							
18.52	16.10							
19.43	13.50							
20. 4	16.20							
20.39	13.40							
21. 5	16.30							
22.40	21.50							
23.22	23.30							
	(†)							
May 2		May 2		May 2		May 2		
1. 0	21.25.16*		(†)		(†)	0. 0	58·2	58·0
3. 0	21.45*	1. 0	·0879*	0.42	·00910	1. 0	59·8	59·2
9. 0	12.57*	2.46	·0872	6.19	·00205	3. 0	62·5	61·8
21. 0	13.26*	3.20	·0874	7.40	·00360	6. 0	64·0	64·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		May 2		May 2		May 2		
h m	° ′ ″	h m		h m		h m	°	°
		4.43	·0888	10.20	{·00397 ·00570	9. 0	65·3	65·2
			***			12. 0	63·7	64·8
		8. 7	·0881	13.40	·00780	18. 0	56·3	57·1
		8.24	·0875	17.35:	·01274	21. 0	56·0	56·9
			***	22. 0	{·00760 ·00628			
		13.40	·0887					
		16.41	·0885	23.59	·00524			
		21.16	·0872					
		21.52	·0875					
			(†)					
May 3		May 3		May 3		May 3		
	(†)		(†)	0. 0	·00524	0. 0	58·3	58·0
0.15	21.25. 0	0.24	·0872	1. 5	·00520	1. 0	59·8	60·3
1. 7	26.10	0.46	·0873	2.45	·00300	3. 0	62·0	64·0
3.51	18.30	0.51	·0868		(†)	9. 0	64·5	67·0
5.40:	15.30	1. 7	·0871	3. 0	·00282*	21. 0	52·3	53·8
8.41	16.30	1.20	·0864	9. 0	·00005*			
11.20	20. 0		***	11.52	·00310			
14.37	19. 0	4.55	·0880	17.22	·01005			
14.52	21.35	5. 8	·0874	20.52	·00524			
15.12	20.35		***	23.59	·00345			
15.31	22.40	7.10	·0877					
16. 9	20. 5	7.45	·0875					
16.15	20.30		***					
16.40	17. 0	13.36	·0894					
17.39	15.30	13.45	·0902					
17.52	16. 0	14. 8	·0899					
18.12	13.20	14.14	·0906					
18.25	14.50	14.30	·0900					
18.30	14. 0	15. 0	·0906					
18.43	15.20	15.18	·0904					
18.51	13.15	15.35	·0897					
	***	16.30:	·0908					
19.55	12.55		***					
20.11	11.10	18.15	·0910					
20.43	12.40	18.51	·0900					
23. 0	27. 0		***					
23.59	27. 0	20.22	·0896					
		22.10	·0878					
			***					
		23.30	·0871					
		23.59	·0874					
May 4		May 4		May 4		May 4		
0. 0	21.27. 0	0. 0	·0874	0. 0	·00345	1. 0	55·8	57·2
1. 0	27.40	0. 6	·0875	1.40	·00265	3. 0	60·0	62·0
3.15	21. 0	0.27	·0873	4. 5	−·00120	9. 0	65·0	66·0
3.30	18.20	0.53	·0879		(†)	21. 0	55·0	57·0
	***	1.10	·0873	9. 0	−·00287			
6.14	15.15		***	14.27	−·00025			
10. 3	15.25	1.52	·0872	18. 0	·00390			
	***	2.10	·0877	21.56:	·00704			
17.12	19.55		***	23.59	·00612			
17.21	18.10	2.45	·0878					
18. 0	18.10	3.13	·0888					
18.40	21.30	3.30	·0872					
19.40	17. 0	4. 2	·0884					
19.46	17.35	4.13	·0880					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

On May 1, the Photographic Trace for the Horizontal Force Magnet, and on May 2 that for the Declination Magnet, were too faint for use.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 4		May 4						
h m	° ′ ″	h m		h m		h m	°	
20. 6	21. 16. 30	4. 23	·0887					
20. 14	14. 0	4. 32	·0884					
20. 28	21. 30	4. 38	·0888					
21. 10	17. 0		***					
21. 52	18. 50	4. 54	·0881					
22. 39	26. 0		***					
22. 56	25. 30	5. 57	·0878					
23. 24	30. 40		***					
23. 41	28. 30	6. 20	·0881					
23. 55	31. 0		***					
23. 59	30. 30	6. 53	·0875					
		7. 26	·0878					
			***					
		8. 47	·0875					
		9. 33	·0879					
		9. 50	·0874					
		10. 22	·0875					
			***					
		11. 3	·0878					
		12. 6	·0885					
		12. 20	·0893					
		12. 45:	·0887					
		13. 8	·0894					
			***					
		14. 26	·0898					
			***					
		15. 17	·0906					
			***					
		15. 45	·0904					
			***					
		16. 43	·0915					
		16. 54	·0912					
			***					
		19. 45	·0904					
		19. 54	·0908					
			***					
		20. 17	·0904					
		20. 28	·0910					
			***					
		20. 56	·0903					
		21. 7	·0905					
		23. 6	·0874					
		23. 24	·0896					
			(†)					
May 5		May 5		May 5		May 5		
0. 0	21. 30. 30		(†)	1. 0	·02528*	1. 0	56·7	58·0
0. 33	28. 0	1. 0	·0869	3. 0	·02702*	3. 0	58·2	59·1
0. 49	30. 50	2. 30	·0856	9. 0	·02672*	9. 0	57·2	58·3
1. 3	29. 40	2. 47	·0856	22. 0	·02941*	22. 0	49·3	51·0
1. 28	33. 40	3. 10	·0872					
2. 14	32. 20	3. 18	·0873					
2. 58	32. 30	3. 40	·0887					
3. 41	30. 35	3. 50	·0886					
3. 53	28. 0	4. 6	·0868					
4. 9	30. 40	4. 48	·0879					
4. 43	21. 45		***					
5. 21	22. 40	5. 29	·0876					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 5		May 5						
h m	° ′ ″	h m						
6. 39	21. 19. 30	5. 40	·0880					
7. 15	20. 50	5. 49	·0878					
8. 28	20. 55	6. 0:	·0882					
8. 48	22. 35	6. 43	·0878					
9. 48	18. 0	7. 4	·0887					
10. 10	19. 25	7. 38	·0887					
10. 18	19. 0	7. 52	·0893					
10. 54	23. 15	8. 4	·0889					
11. 15	23. 10	8. 23	·0889					
12. 13:	17. 0	9. 5	·0899					
12. 50	18. 15	9. 25	·0885					
	(†)		***					
14. 43	14. 30	10. 10	·0885					
15. 13	14. 55	10. 58	·0900					
15. 43	17. 0	11. 24	·0901					
16. 15	16. 20	11. 40	·0897					
16. 56	21. 10	12. 10	·0897					
17. 18	19. 15	12. 47	·0881					
17. 25	19. 55	12. 58	·0884					
17. 42	17. 30	13. 23	·0900					
17. 55	22. 0	13. 45	·0893					
19. 5	13. 40	14. 10	·0885					
19. 22	14. 0	15. 22	·0903					
19. 35	15. 30	16. 21	·0901					
19. 44	14. 10	17. 0	·0884					
19. 59	13. 50	17. 36	·0896					
20. 11	14. 15	17. 50	·0897					
20. 28	12. 40	18. 9	·0905					
21. 50	18. 50	18. 44	·0898					
	(†)	19. 0	·0899					
		19. 10	·0893					
		19. 40	·0898					
		20. 11	·0897					
		20. 35	·0884					
		21. 45	·0879					
			(†)					
May 6		May 6		May 6		May 6		
8. 26	21. 10. 23*	8. 26	·0886*	8. 26	·02764*	8. 26	58·0	59·0
21. 0	20. 41*	21. 0	·0850*	21. 0	·03012*	21. 0	51·8	51·7
May 7		May 7		May 7		May 7		
1. 0	21. 28. 22*	1. 0	·0856*	0. 0	·02735	1. 0	57·2	57·3
3. 0	23. 17*	3. 0	·0869*	1. 15	·02668	3. 0	60·0	61·0
9. 0	13. 38*	9. 0	·0893*	3. 11	·02380	9. 0	58·0	60·0
21. 0	18. 51*	21. 0	·0881*	6. 32	·02640	21. 0	54·0	55·7
				9. 15	·02715			
				13. 1	·02966			
				16. 18	·03292			
				19. 37	·03120			
					(†)			
				21. 0	·02959*			
				21. 42	·02870			
				23. 59	·02833			
May 8		May 8		May 8		May 8		
1. 0	21. 30. 21*	1. 0	·0882*	1. 0	·02761*	1. 0	57·3	58·0
3. 0	30. 18*	3. 0	·0884*	3. 0	·02651*	3. 0	59·4	59·7

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

May 5, 6, 8 and 10. The Photographic Traces for the Vertical Force Magnet were too faint for use.

VERTICAL FORCE.—May 5. The adjustments were altered so that the scale reading was increased by about 13 divisions, or by 0·01947 parts of the whole Vertical Force.

May 6 to 10. Owing to defects in the paper, the Photographic Traces for the Horizontal Force and Declination Magnets were too faint for use.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 8		May 8		May 8		May 8		
h m	° ′ ″	h m		h m		h m	°	°
9. 0	21. 29. 27*	9. 0	·0881*	9. 0	·02334*	9. 0	60 ·3	61 ·8
21. 0	27. 52*	21. 0	·0871*	21. 0	·02719*	21. 0	57 ·5	59 ·8
May 9		May 9		May 9		May 9		
1. 0	21. 4. 52*	1. 0	·0874*		(†)	0. 0	59 ·5	60 ·3
3. 0	28. 16*	3. 0	·0881*	1. 0	·02654*	1. 0	60 ·0	61 ·3
21. 0	20. 5*	9. 0	·0891*	1. 49	·02570	3. 0	61 ·3	62 ·1
		21. 0	·0888*	3. 45	·02517	6. 0	63 ·0	63 ·8
				8. 53	·02223	9. 0	62 ·7	63 ·0
				12. 54	·02325	12. 0	60 ·0	60 ·7
				14. 59	·02477	18. 0	53 ·3	55 ·1
				17. 10	·02736	21. 0	54 ·0	55 ·4
				19. 7	·02790			
					(†)			
				21. 0	·02786*			
May 10		May 10		May 10		May 10		
1. 0	21. 24. 33*	1. 0	·0873*	1. 0	·02743*	0. 0	57 ·0	58 ·0
3. 0	20. 12*			3. 0	·02968*	1. 0	57 ·3	58 ·2
9. 0	19. 51*			9. 0	·02279*	3. 0	59 ·0	60 ·2
21. 0	18. 7*			21. 0	·02609*	9. 0	61 ·8	63 ·0
						21. 0	59 ·3	61 ·2
May 11		May 11		May 11		May 11		
	(†)		(†)		(†)	1. 0	61 ·3	62 ·4
1. 0	21. 28. 52*	1. 0	·0946*	1. 0	·02609*	3. 0	62 ·0	63 ·7
3. 0	25. 40*	2. 10	·0944	3. 0	·02594*	9. 30	63 ·0	64 ·3
4. 25	21. 0	2. 51	·0942	4. 56	·02607	21. 0	62 ·0	63 ·0
4. 44	22. 0	3. 51	·0952	5. 43	·02627			
5. 0	19. 55	4. 6	·0950	8. 36	·02525			
5. 8	21. 10	4. 24	·0962	11. 27	·02505			
5. 24	20. 5	4. 35	·0958	14. 0	·02610			
6. 0	19. 30		***	15. 12	·02567			
6. 24	17. 50	5. 25	·0965	16. 17	·02625			
6. 32	19. 10		***	16. 42	·02588			
7. 11	15. 20	6. 0	·0961	19. 33	·02650			
7. 15	16. 0	6. 13	·0958		(†)			
7. 29	15. 20	6. 25	·0949	21. 0	·02571*			
7. 42	19. 0	6. 36	·0954					
7. 54	17. 10		(†)					
8. 16	17. 0	8. 30	·0945					
8. 35	18. 50	8. 46	·0940					
8. 49	18. 20	9. 7	·0948					
8. 56	19. 50	9. 20	·0946					
9. 13	17. 5	9. 39	·0947					
9. 30	18. 15	10. 10	·0958					
10. 0	18. 10	10. 40	·0946					
10. 8	19. 0	10. 50	·0950					
10. 26	14. 20		***					
10. 54	19. 0	12. 15	·0944					
11. 13	16. 15	13. 7	·0944					
	(†)	13. 21	·0947					
12. 11	19. 0		***					
14. 52	15. 0	15. 0	·0950					
15. 17	15. 25	15. 24	·0945					
15. 44	18. 40	15. 50	·0949					
16. 10	16. 40	16. 23	·0944					
16. 30	18. 0	16. 46	·0950					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 11		May 11						
h m	° ′ ″	h m		h m		h m	°	°
17. 18	21. 16. 10	17. 40	·0945					
17. 42	17. 10	18. 10	·0947					
17. 56	15. 50	19. 0	·0941					
18. 10	17. 0	19. 16	·0945					
18. 35	15. 40	20. 30	·0931					
	(†)		***					
21. 0	15. 38*	21. 52	·0930					
		22. 21	·0921					
		22. 33	·0923					
		22. 52	·0917					
			(†)					
May 12		May 12		May 12		May 12		
	(†)		(†)		(†)	1. 0	64 ·0	65 ·0
0. 54	21. 24. 45	1. 0	·0930	1. 0	·02264*	3. 0	65 ·3	66 ·2
1. 52	22. 50	1. 28	·0926	2. 13	·02550	9. 0	65 ·0	66 ·0
2. 10	24. 0	2. 22	·0937	3. 39	·02478	21. 45	59 ·3	60 ·6
2. 59	20. 40	2. 30	·0933	6. 0	·02590			
3. 42	19. 50	2. 50	·0938	10. 22	·02612			
4. 27	20. 10	3. 22	·0935	14. 36	·02772			
5. 9	19. 0	3. 35	·0938	17. 30	{·03008			
6. 10	15. 20	3. 45	·0933		·02937			
7. 25	15. 15	4. 51	·0948	23. 59	·03033			
7. 30	16. 5	5. 27	·0940					
7. 44	15. 40	6. 16	·0948					
8. 30	16. 30	6. 31	·0946					
8. 50	18. 30	7. 16	·0951					
9. 40	14. 0	7. 40	·0946					
10. 21	14. 40	7. 52	·0948					
10. 40	13. 30	8. 17	·0944					
10. 58	14. 30	8. 47	·0947					
11. 43	13. 40	9. 30	·0941					
12. 12	11. 10	10. 6	·0945					
12. 43	13. 40	10. 52	·0944					
13. 10	11. 20	11. 18	·0938					
13. 24	12. 30	11. 35	·0944					
13. 41	12. 10	12. 0	·0944					
14. 18	13. 15	12. 22	·0934					
15. 10	8. 0	12. 40	·0940					
16. 3	12. 30	12. 50	·0939					
17. 13	13. 50		***					
17. 45	12. 40	14. 5	·0954					
17. 58	14. 0		***					
19. 6	11. 30	14. 57	·0956					
19. 44	13. 10	15. 27	·0941					
19. 51	12. 30	16. 16	·0940					
20. 39	16. 15	16. 36	·0934					
21. 17	17. 0		***					
21. 36	18. 40	17. 45	·0946					
21. 49	18. 20	18. 30	·0947					
23. 59	24. 0		***					
		20. 45	·0934					
		21. 45	·0928					
			***					
		22. 55	·0932					
		23. 14	·0939					
		23. 55	·0038					
			(†)					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

May 10 and 11. Workmen were engaged in the room and deranged the adjustments of the Horizontal Force Magnet, and thus interrupted the series.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. of H. F. Magnet.	Readings of Thermometers. of V. F. Magnet.
May 13		May 13		May 13		May 13		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 24. 0	0. 0	·0934	0. 0	·03023	8. 0	[illegible]	[illegible]
1. 33	25. 40	0. 34	·0931	3. 14	·03082	21. 0	[illegible]	[illegible]
2. 14	24. 0		***	9. 2	·02[illegible]00			
3. 24	23. 0	1. 42	·0940	13. 41	·02764			
3. 30	23. 40		***	19. 7	·03172			
4. 32	19. 55	2. 50	·0939	23. 59	·03210			
4. 54	20. 10		***					
5. 14	18. 30	3. 41	·0949					
5. 43	18. 55		***					
6. 15	17. 30	4. 20	·0949					
6. 52	17. 50	4. 38	·0946					
8. 5	14. 0	4. 51	·0948					
8. 43	16. 30	5. 4	·0955					
8. 52	16. 20	5. 11	·0950					
9. 12	17. 15	5. 29	·0948					
13. 11	17. 0	5. 55	·0961					
13. 49	15. 30	6. 16	·0943					
14. 10	17. 20		***					
14. 52	15. 0	7. 0	·0950					
15. 12	15. 20	7. 25	·0943					
15. 52	13. 0	7. 46	·0931					
16. 30	13. 5		***					
16. 50	10. 50	9. 10	·0936					
17. 4	10. 20	9. 30:	·0932					
17. 54	11. 35	11. 7:	·0939					
18. 10	13. 0	11. 46	·0935					
18. 17	11. 55		***					
18. 51	15. 0	14. 0	·0940					
19. 52	15. 30	14. 22	·0936					
20. 12	18. 0	15. 14	·0940					
21. 24	20. 0		***					
23. 29	27. 55	17. 50	·0941					
23. 40	27. 30		***					
23. 44	28. 0	19. 9	·0936					
23. 59	27. 0	20. 8	·0948					
			***					
		22. 10	·0938					
		22. 29	·0945					
		22. 45	·0938					
		23. 59	·0930					
May 14		May 14		May 14		May 14		
0. 0	21. 27. 0	0. 0	·0930	0. 0	·03210	1. 0	61·3	62·8
0. 58	24. 20	0. 47	·0931	5. 14	·02977	3. 0	63·2	64·7
1. 30	26. 10	1. 28	·0944	7. 19	·02828	9. 0	63·5	65·0
2. 42	22. 35	2. 8	·0931	10. 11	·02764	21. 0	58·3	60·2
3. 44	22. 25	2. 31	·0928	11. 52	·02780			
4. 15	21. 0	4. 0	·0943	14. 47	·02930			
4. 52	20. 30	4. 15	·0943	20. 15	·03200			
5. 33	18. 25	5. 20	·0961		·03250			
5. 41	18. 45	5. 40	·0952	21. 20	·03280			
6. 30	13. 50	5. 50	·0952	23. 59	·03174			
7. 29	17. 0	6. 17	·0960					
13. 8	16. 40	6. 55	·0945					
13. 40	18. 5		***					
14. 0	17. 45	8. 12	·0947					
14. 17	16. 5	9. 36	·0942					
15. 22	13. 55	12. 6	·0950					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. of H. F. Magnet.	Readings of Thermometers. of V. F. Magnet.
May 14		May 14						
h m	° ′ ″	h m		h m		h m	°	°
15. 52	21. 14. 50	13. [illegible]	·0947					
16. 3[illegible]	14. 20	14. 0:	·0952					
16. 52	13. 15	14. 58	[illegible]					
18. 0	13. [illegible]	15. 25	·0944					
18. 35	14. 40	16. 57	·0944					
18. 43	14. 0	17. 30	·095[illegible]					
19. 9	13. 50	18. 15	·0948					
19. 27	11. 35	18. 30	·0942					
20. 21	13. 20		***					
22. 17	20. 30	22. 0	·0928					
23. 54	22. 0		***					
23. 59	22. 45	23. 59	·0935					
May 15		May 15		May 15		May 15		
0. 0	21. 22. 45	0. 0	·0935	0. 0	·03174	1. 0	[illegible]	[illegible]
0. 12	23. 30	0. 22	·093[illegible]	2. 58	·02992	3. 0	[illegible]	[illegible]
0. 27	23. 0	1. 24	·0931	6. 5[illegible]	·02643	9. 0	67·7	68·2
0. 43	24. 20		***	9. 12	·02793	21. 0	[illegible]	[illegible]
1. 39	21. 40	3. 0	·0936	11. 51	·02844			
4. 45	15. 0	3. 15	·0934	14. 7	·02963			
5. 51	14. 15		***	20. 13	·03566			
6. 52	15. 10	4. 42	·0935	23. 59	·03294			
7. 57	14. 20	5. 23	·0943					
8. 58	16. 0	5. 50	·0938					
9. 14	15. 10	6. 15	·0944					
9. 28	15. 50		***					
9. 50	13. 45	7. 16	·0942					
10. 10	14. 30	7. 37	·0939					
10. 39	14. 30		***					
10. 54	15. 45	8. 48	·0940					
11. 45	12. 50	9. 11	·0953					
12. 10	9. 30	9. 51	·0942					
12. 27	10. 0	10. 17	·0939					
12. 43	10. 20	10. 43	·0941					
13. 27	14. 30	11. 37	·0935					
15. 4	17. 20		***					
15. 48	15. 10	11. 56	·0937					
16. 15	16. 20	12. 37	·0926					
	***		***					
17. 54	12. 0	13. 33	·0937					
18. 12	12. 30	17. 12:	·0948					
19. 18	10. 45		***					
19. 30	11. 30	23. 7	·0931					
19. 50	10. 20	23. 59	·0930					
20. 12	10. 30							
20. 23	12. 10							
22. 12	16. 20							
23. 59	23. 30							
May 16		May 16		May 16		May 16		
0. 0	21. 23. 30	0. 0	·0930	0. 0	·03294	0. 0	[illegible]	[illegible]
0. 40	25. 10	1. 47	·0930	2. 57	·03260	1. 0	[illegible]	[illegible]
2. 21	23. 45	2. 40	[illegible]	5. 23	·03105	3. 0	[illegible]	[illegible]
4. 10	17. 30		***	10. 0	·03005	6. 0	[illegible]	[illegible]
5. 8	15. 40	4. 18	·0948	14. 10	·03140	9. 0	[illegible]	[illegible]
5. 59	15. 35	5. 3	·0948	17. 52	[illegible]	12. 0	[illegible]	[illegible]
6. 27	14. 20	5. 57	·0961	18. 10	[illegible]	18. 0	58·1	59·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 16		May 16		May 16		May 16		
h m	° ′ ″	h m		h m		h m	°	°
7.15	21.14.50	6.15	·0967	18.52	{ ·03350	21.0	58·0	59·0
7.54	16.20	7.10	·0947		{ ·03190			
9.35	18.0		***	21.58	·03253			
10.12	14.10	7.40	·0947	23.59	·03198			
10.35	16.15	7.55	·0952					
10.56	14.45	8.13	·0952					
11.20	16.0	8.20	·0950					
13.16	17.30	9.6	·0956					
13.30	17.30	9.26	·0955					
14.10	17.20	9.36	·0953					
14.41	15.0	10.22	·0957					
15.0	13.30	10.47	·0940					
15.17	15.15	11.2	·0941					
16.15	15.45	11.25	·0947					
16.41	13.30		***					
17.14	12.30	12.54	·0944					
17.52	12.20	13.53	·0951					
18.7	13.0	14.15	·0960					
19.15	10.25	15.20	·0948					
19.24	11.40	17.17	·0948					
20.27	10.30	17.45	·0946					
22.28	18.45	18.22	·0947					
23.59	26.50	22.3	·0937					
		23.10	·0940					
		23.59	·0939					
May 17		May 17		May 17		May 17		
0.0	21.26.50	0.0	·0939	0.0	·03198	0.0	59·5	60·0
0.44	25.30	0.18	·0951	2.57	·03186	1.0	60·0	60·5
0.54	26.15	1.20	·0958	6.13	·03078	3.0	61·5	62·3
1.28	24.10	1.56	·0948	10.6	·03040	9.0	61·8	62·0
2.1	24.40	2.27	·0957	13.57	·03228	21.0	56·0	57·3
2.43	20.40		***	15.10	·03255			
5.17	17.0	5.11	·0970	16.26	{ ·03330			
5.43	15.35		***		{ ·03303			
6.44	14.10	6.13	·0968	17.26	·03370			
7.27	12.0	6.30	·0960	18.40	{ ·03360			
7.54	12.0	6.45	·0962		{ ·03238			
9.16	16.45	7.7:	·0955	22.19	·03288			
9.40	19.30	7.27	·0958	23.59	·03230			
10.30	16.30	7.40	·0954					
12.55	18.20		***					
13.30	17.45	9.5	·0951					
13.51	19.35	9.22	·0956					
14.21	17.20	10.45	·0958					
14.51	13.50		***					
15.14	13.20	11.42	·0954					
15.52	16.30	12.37	·0955					
16.14	14.30	13.15	·0960					
16.42	12.30	13.47	·0959					
16.59	12.10	14.40	·0977					
17.14	13.30	15.40	·0949					
17.44	10.35	16.15	·0957					
18.54	9.40	16.38	·0954					
19.10	11.30		***					
19.16	10.20	17.15	·0956					
19.30	10.30		***					
19.43	12.30	21.8	·0932					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 17		May 17						
h m	° ′ ″	h m		h m		h m	°	°
20.23	21.13.40	22.5	·0938					
20.43	13.25		***					
21.50	20.30	23.59	·0936					
22.41	24.30							
23.59	27.30							
May 18		May 18		May 18		May 18		
0.0	21.27.30	0.0	·0936	0.0	·03230	1.0	59·2	59·6
1.0	29.45	0.56	·0950	1.54	·02760	3.0	61·5	61·5
2.36	25.0	2.6:	·0942	4.44	·02518	9.0	63·2	64·0
3.10	25.0	2.50	·0955	7.37	·02730	21.0	57·0	58·0
3.44	22.5	3.18	·0960	14.35	·02917			
5.12	19.20	3.53	·0947	20.43	·03322			
5.21	19.50	4.46	·0957	22.28	·03370			
6.23	17.10	5.6	·0955	23.59	·03333			
6.43	14.0	5.45:	·0964					
7.27	13.20	6.21	·0960					
7.52	15.35	6.30	·0962					
8.39	17.20	6.46	·0953					
10.30	17.40		***					
12.14	17.0	7.38	·0966					
12.44	18.0		***					
14.11	15.10	8.47	·0949					
14.55	11.0		***					
15.26	13.0	12.15	·0952					
15.57	16.55		***					
16.24	14.10	13.8	·0958					
16.50	15.0	13.27	·0954					
17.8	13.40	14.15	·0958					
17.12	14.10	14.52	·0954					
17.27	12.50	15.10	·0948					
17.54	13.30	15.20	·0951					
18.19	12.30	15.35	·0946					
18.48	12.15		***					
18.57	13.0	16.13	·0954					
19.10	12.0	16.23	·0948					
19.26	13.30	17.48	·0949					
19.51	11.40	18.12	·0944					
20.0	12.55		***					
20.53	13.40	20.51	·0944					
22.39	22.30		***					
23.21	22.45	22.7	·0932					
23.59	25.0	22.20	·0934					
			***					
		22.45	·0927					
			***					
		23.47	·0939					
		23.59	·0938					
May 19		May 19		May 19		May 19		
0.0	21.25.0	0.0	·0939	0.0	·03333	1.0	60·3	61·1
1.7	26.5	0.11	·0937	0.41	·03330	3.0	63·7	64·8
1.39	24.45	1.4	·0947	2.51	·03133	9.0	65·8	67·2
2.12	25.0	1.13	·0942	4.59	·02785	22.0	63·0	63·5
2.22	26.45	1.36	·0939	6.37	·03155			
2.58	22.40	2.2	·0946	9.12	·03487			
5.9	17.50	2.17	·0962	14.10	·03652			
	(†)		***	20.40	·04050			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

May 19. The Declination Magnet was in contact with some portion of its apparatus from 5^{h}. 10^{m}.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. corrected for temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. corrected for temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
		May 19		May 19				
h m	° ′ ″	h m		h m		h m	°	°
		2. 53	·0946	22. 27	·04038			
			***	23. 59	·03880			
		3. 37	·0951					
		3. 45	·0958					
		3. 52	·0952					
			***					
		4. 16	·0953					
		4. 22	·0957					
		4. 45	·0953					
			(†)					
		9. 0	·0941*					
		16. 8	·0947					
		17. 47	·0949					
		18. 50	·0952					
		19. 9	·0955					
			***					
		22. 13	·0923					
			(†)					
		May 20		May 20		May 20		
			(†)	0. 0	·03880	7. 0	68·5	70·0
		7. 0	·0928*	2. 45	·03522	21. 0	62·0	63·0
		13. 30	·0939	5. 43	·04080			
			***	8. 27	·04253			
		17. 15:	·0942	10. 12	·04260			
			***	11. 56	·04315			
		20. 47	·0911		(†)			
		21. 22:	·0917	21. 0	·05021*			
		22. 0	·0913					
			***					
		23. 17	·0914					
		23. 46	·0919					
		23. 59	·0915					
		May 21		May 21		May 21		
		0. 0	·0915	1. 0	·04639*	1. 0	66·4	68·0
		1. 53	·0918	3. 0	·05168*	3. 0	69·0	71·0
		2. 30	·0929	9. 0	·05505*	9. 0	70·7	71·8
			***	21. 8	·05545*	21. 8	63·0	63·7
		2. 50	·0928					
		3. 13	·0936					
		3. 40:	·0928					
		4. 2	·0931					
		4. 22	·0931					
			(†)					
		9. 0	·0931*					
		10. 18	·0932					
			***					
		17. 15	·0952					
			***					
		18. 17	·0949					
		19. 40	·0952					
			***					
		23. 0	·0923					
		23. 59	·0918					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. corrected for temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. corrected for temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
May 22		May 22		May 22		May 22		
h m	° ′ ″	h m		h m		h m	°	°
	(†)	0. [illegible]	[illegible]	[illegible]	[illegible]	1. [illegible]	[illegible]	[illegible]
0. 44	21. 20. 50		***	1. [illegible]	[illegible]	3. 0	[illegible]	[illegible]
1. 0	21. 30	0. 47	·0923	3. 5	·021[illegible] ·022[illegible]	[illegible]	[illegible]	[illegible]
2. 14	19. 20	1. [illegible]	[illegible]			21. 0	[illegible]	[illegible]
2. 22	19. 55		***	5. 40	·02628			
4. 43	13. 10	2. 50	·0923	7. 12	[illegible]			
5. 22	12. 0	3. 17	·0926	8. 24	[illegible]			
5. 31	15. 0		***	8. 29	[illegible]			
5. 48	13. 30	3. 58	·0921	9. 11	·02828			
6. 14	12. 20	4. 40	·0923	12. 54	[illegible]			
6. 26	13. 15	4. 51	·0920	16. 21	·03363			
6. 51	12. 20	5. 17	·0925	21. 12	·02800			
7. 10	13. 0	5. 31	·0922	23. 59	·02670			
7. 43	11. 45	5. 40	·0924					
7. 56	12. 0	5. 52	·0947					
8. 13	10. 30	6. 17	·0928					
8. 59	12. 0	6. 42	·0948					
9. 36	11. 0	7. 16	·0925					
9. 57	8. 15	7. 53	·0934					
10. 26	10. 40	8. 8	·0931					
11. 13	6. 0	8. 30	·0936					
11. 27	7. 20	9. 4	·0928					
11. 57	3. 50		***					
12. 35	16. 30	10. 15	·0925					
13. 0	5. 25	10. 26	·0930					
13. 40	8. 45	10. 45	·0927					
14. 2	7. 20	11. 4	·0931					
14. 56	12. 10	11. 16	·0924					
17. 58	7. 0	11. 30	·0924					
19. 18	7. 0	11. 45	·0935					
20. 51	8. 40	12. 15	·0916					
22. 28	16. 0	12. 30	·0932					
23. 36	23. 35	12. 46	·0909					
23. 59	23. 55	13. 17	·0934					
			***					
		14. 16	·0928					
		14. 30	·0933					
			***					
		17. 6	·0937					
			***					
		22. 27	·0905					
		22. 46	·0912					
			***					
		23. 17	·0914					
		23. 30	·0930					
		23. 59	·0922					
May 23		May 23		May 23		May 23		
0. 0	21. 23. 55	0. 0	·0922	0. 0	·02670	0. 0	[illegible]	[illegible]
1. 43	23. 0		***	1. 43	·02590	1. [illegible]	[illegible]	[illegible]
1. 53	24. 30	0. 47	·0930	5. 15	·02193	3. 0	[illegible]	[illegible]
2. 13	22. 40	0. 52	·0935	5. 58	·02380	6. 0	[illegible]	[illegible]
2. 27	23. 30	1. [illegible]	·0929	7. 57	·02660	9. 0	[illegible]	[illegible]
2. 51	21. 20	1. 25	[illegible]	8. 25	·02603	12. 0	58·8	[illegible]
3. 12	21. 30	1. 46	[illegible]	9. 54	·02600	18. 0	[illegible]	[illegible]
3. 21	20. 30	1. [illegible]	·0952	14. 18	·02817	21. 0	[illegible]	[illegible]
3. 43	23. 10		***	14. 44	·02790			
4. 9	21. 15	2. 15	[illegible]	18. 31	·03285			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

May 20 and 21. The Declination Magnet was in contact with some part of its apparatus: the results therefore are omitted, not being trustworthy.

VERTICAL FORCE.—May 20d. 12h. After this time the Photographic Trace was lost, owing to the pencil of light falling beyond the paper. On May 22d. at 0h. the adjustments were altered, so that the scale-reading was diminished by 22[illegible] or by 0·034005 parts of the whole Vertical Force.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 23		May 23		May 23				
h m	° ′ ″	h m		h m		h m	°	°
4.37	21.20.50	2.26	·0947	19.30	·03190			
4.52	23.0		***	23.59	·02900			
5.13	18.30	2.45	·0947					
5.37	21.10	3.0	·0958					
6.15	14.15	3.7	·0950					
6.28	16.30	3.13	·0961					
6.57	8.40	3.26	·0926					
7.44	15.20	3.47	·0956					
7.55	14.0	4.2	·0953					
8.44	15.0	4.10	·0960					
8.53	16.10	4.15	·0956					
9.25	13.30	4.20	·0960					
9.46	13.10	4.26	·0957					
10.26	7.0	4.40	·0959					
10.40	8.25	4.43	·0946					
11.0	4.0	4.58	·0963					
11.44	10.50	5.7	·0957					
11.57	7.0	5.20	·0926					
12.11	7.40	5.40	·0961					
12.17	5.40	5.58:	·0965					
12.26	6.10	6.16	·0959					
12.34	3.20	6.26	·0964					
12.43	7.10	6.38	·0959					
14.0	10.0	6.52	·0911					
14.15	9.15		***					
14.55	22.20	7.27	·0929					
15.28	4.20	7.36	·0925					
16.5	9.30	7.45	·0930					
16.41	9.30	8.10	·0919					
	***	8.29	·0923					
19.0	5.30	8.47	·0919					
19.11	7.0	9.10:	·0930					
19.39	5.0	9.27	·0920					
20.0	8.0	10.2	·0933					
20.14	8.10	10.12	·0930					
20.43	11.10	10.20	·0916					
20.55	11.0	10.43	·0927					
21.30	12.35	11.0	·0915					
23.30	22.10		***					
23.59	23.0	11.45	·0924					
		11.52	·0919					
		12.0	·0924					
		12.5	·0919					
		12.8	·0922					
		12.13	·0911					
		12.22	·0928					
			***					
		12.45	·0926					
		12.50	·0913					
		13.0	·0923					
		13.5	·0919					
		13.17	·0926					
		13.25	·0921					
		13.40	·0926					
		14.16	·0917					
		14.52	·0935					
			***					
		16.0	·0924					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		May 23						
h m	° ′ ″	h m		h m		h m	°	°
		18.40	·0920					
			***					
		19.45	·0910					
			***					
		23.16	·0898					
		23.40	·0907					
		23.52	·0902					
		23.59	·0903					
May 24		May 24		May 24		May 24		
0.0	21.23.0	0.0	·0904	0.0	·02900	0.0	65·0	65·2
0.15	24.30	0.27	·0918	5.9	·02666	1.0	65·4	65·8
0.52	19.50	0.51	·0900	7.40	·02337	3.0	67·0	67·4
1.50	22.0		***	9.10	{ ·02395	9.0	69·0	70·0
2.12	21.40	2.6	·0938		·02480 }	21.0	62·2	62·2
2.21	22.30	2.15	·0932	10.40	·02444			
3.43	18.50	2.33	·0943	13.41	·02630			
3.57	22.0		***	18.0	·03128			
4.37	15.30	3.12	·0945	21.9	{ ·02700			
4.52	11.40	3.43	·0933		·02320 }			
5.10	11.45	4.10	·0962	23.59	·02260			
5.15	13.30	4.22	·0947					
5.30	14.20	4.46	·0965					
5.45	13.0		***					
5.54	14.0	5.52	·0958					
6.29	14.30		***					
6.59	12.20	6.28	·0939					
7.11	13.20	6.50	·0945					
7.30	10.55		***					
7.51	13.30	7.26	·0927					
8.13	12.0	7.45	·0930					
8.39	12.45	8.4	·0924					
9.14	5.0	8.30	·0925					
9.35	11.0	8.43	·0915					
9.44	11.50	8.53	·0914					
9.57	17.5	9.2	·0911					
10.28	5.10	9.23	·0924					
10.49	18.30	9.45:	·0915					
11.4	11.45	9.54	·0927					
11.14	14.0	10.12	·0911					
11.39	10.30	10.36	·0943					
12.0	13.40	10.57	·0906					
12.55	13.20	11.10	·0912					
13.13	11.55	11.16	·0909					
13.36	17.20		***					
13.45	15.0	13.30	·0933					
14.1	15.0	13.52	·0926					
14.30	17.25	14.33	·0930					
14.52	16.20		***					
15.21	19.20	15.8	·0925					
15.56	15.15		***					
16.14	15.20	16.40	·0950					
16.39	12.40		***					
16.43	14.10	17.8	·0939					
16.54	12.30		***					
17.43	12.30	18.37	·0937					
18.24	11.30	18.50	·0945					
18.39	9.0	19.8	·0926					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 24		May 24						
h m	° ′ ″	h m		h m		h m		
18. 58	21. 10. 5	21. 5	·0913					
19. 10	12. 0	22. 15	·0916					
19. 25	9. 0	23. 4	·0911					
20. 30	9. 30	23. 37	·0915					
20. 50	11. 30	23. 59	·0914					
21. 28	9. 30							
23. 59	18. 15							
May 25		May 25		May 25		May 25		
0. 0	21. 18. 15	0. 0	·0914	0. 0	·02260	1. 0	64·0	64·0
0. 15	20. 25	0. 26	·0921	4. 9	·02225	3. 0	65·2	65·0
0. 37	21. 50	0. 45	·0915	8. 51	·02126	9. 0	65·1	65·1
1. 0	20. 50	1. 10	·0921	13. 11	·02352	21. 0	59·8	60·7
1. 18	21. 40	1. 45	·0916	23. 59	·02088			
2. 44	20. 35	2. 10	·0924					
3. 33	18. 5	2. 37	·0913					
5. 56	17. 0	3. 22	·0936					
6. 18	15. 55		* * *					
6. 28	16. 10	4. 0	·0931					
7. 6	15. 5	4. 26	·0949					
7. 55	16. 0	4. 37	·0941					
8. 11	19. 20	4. 58	·0956					
8. 43	16. 20	5. 15	·0947					
9. 13	18. 30	5. 33	·0941					
9. 16	17. 20	5. 40	·0942					
9. 27	19. 0	6. 2	·0935					
9. 41	17. 20	6. 8	·0937					
10. 42	14. 30	6. 17	·0934					
11. 0	18. 0	6. 35	·0944					
11. 44	15. 30	6. 47	·0944					
14. 44	18. 0	7. 0	·0936					
16. 10	16. 0	7. 10	·0941					
16. 39	14. 0	7. 26	·0950					
18. 38	13. 40	7. 42	·0940					
18. 44	13. 0	7. 57	·0978					
19. 0	14. 30	8. 10	·0947					
19. 12	13. 55		* * *					
20. 40	15. 30	8. 45	·0948					
20. 54	14. 30	9. 7	·0968					
21. 37	20. 30	9. 10	·0946					
21. 44	19. 10	9. 21	·0964					
21. 58	23. 30	9. 40	·0953					
22. 25	22. 30	9. 46	·0956					
22. 30	24. 10	9. 53	·0955					
22. 43	23. 20	10. 2	·0949					
22. 59	26. 0	10. 10	·0956					
23. 10	25. 40	10. 26	·0945					
23. 15	27. 0	10. 30	·0953					
23. 59	27. 50	10. 42	·0941					
		11. 28	·0946					
			* * *					
		17. 4	·0932					
			* * *					
		18. 47	·0918					
		23. 10	·0916					
		23. 27	·0922					
		23. 45	·0920					
		23. 59	·0923					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 25		May 26		May 26		May 26		
h m	° ′ ″							
0. 0	21. 27. 50	0. [illegible]	·0923		(†)	1. 0	[illegible]	[illegible]
0. 41	25. 50	0. 37	[illegible]	1. 0	[illegible]	3. 0	64·1	[illegible]
1. 0	26. 30		* * *	3. 0	·01972*	9. 0	63·2	65·0
1. 19	27. 15	3. 20	[illegible]	3. 57	·01920	22. 40	[illegible]	[illegible]
2. 7	27. 50	3. 33	[illegible]	8. 26	·01554			
2. 57	25. 0		* * *	13. 12	·01793			
4. 0	19. 10	4. 17	[illegible]	17. [illegible]	·02188			
5. 7	16. 10		* * *	18. 40	[illegible]			
6. 15	15. 0	5. 47	·0948	19. 26	[illegible]			
6. 26	15. 30	6. 8:	·0946	23. 59	·01870			
6. 49	14. 30	6. 32	·0952					
7. 10	15. 2[illegible]	6. 54	·0944					
7. 45	14. 30		* * *					
8. 7	15. 0	7. 52	·0951					
8. 26	14. 10	8. 42	·0945					
9. 15	15. 10	9. 3	·0949					
10. 11	14. 10	9. 15	·0946					
10. 42	15. 20	9. 46	·0946					
11. 8	14. 30	10. 2	·0948					
11. 15	15. 5	10. 26	·0944					
12. 10	14. 30		* * *					
12. 24	16. 10	13. 45	·0939					
12. 31	15. 30	14. 17	·0945					
13. 28	17. 40	16. 40	·0945					
14. 15	16. 0	18. 36	·0938					
14. 39	16. 30	19. 17	·0926					
15. 11	18. 20	22. 10	·0925					
15. 50	15. 0	22. 24	·0919					
16. 42	14. 20	22. 53	·0929					
17. 10	12. 30		(†)					
17. 38	11. 10							
17. 49	12. 10							
18. 44	11. 20							
19. 0	13. 10							
19. 40	17. 55							
20. 10	16. 20							
20. 41	19. 10							
20. 59	18. 15							
21. 5	19. 5							
21. 28	19. 0							
22. 45	25. 25							
22. 57	24. 20							
23. 59	27. 30							
May 27		May 27		May 27		May 27		
0. 0	21. 27. 30	0. 0	·0918	0. 0	·01870	8. 30	[illegible]	61·7
0. 41	27. 40	0. 37	·0932	4. 18	[illegible]	21. 0	58·0	58·6
1. 18	25. 30	1. 13	·0936	9. 35:	·01194			
1. 52	27. 0	1. 42	[illegible]	16. 40	·01682			
2. 17	25. 10	2. 0	·0959	23. 59	[illegible]			
3. 14	22. 30	2. 15	·0948					
3. 46	18. 0	2. 42	·0945					
	(†)	3. 7	·0955					
5. 42	13. 0	3. 40	·0938					
6. 55	13. 10	4. 4	·0920					
8. 58	16. 10	4. 33	[illegible]					
9. 47	15. 10	5. 0	·0963					
10. 7	16. 30	5. 30	[illegible]					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
May 27	
h m	° ′ ″
10. 45	21. 12. 20
11. 45	14. 15
12. 32	16. 30
13. 11	14. 50
13. 30	20. 20
14. 0	16. 30
14. 44	17. 20
15. 12	19. 10
15. 28	18. 30
16. 8	22. 30
16. 42	21. 30
16. 45	23. 0
17. 36	15. 30
17. 46	15. 30
18. 11	12. 0 ***
19. 8	13. 20
19. 15	11. 30
19. 29	12. 30
19. 47	10. 30
19. 54	12. 20 ***
21. 44	15. 0
21. 56	16. 30
22. 12	15. 55
23. 0	20. 30 (†)
May 28	
	(†)
0. 11	21. 24. 20
0. 51	22. 0
2. 59	21. 5
5. 40	13. 10
6. 41	13. 20
6. 55	15. 0
9. 49	16. 0
10. 42	13. 40
11. 4	15. 30 ***
12. 59	15. 30 ***
15. 12	17. 10 ***
16. 54	13. 30 ***
17. 24	15. 0
17. 57	12. 50
18. 35	11. 25
19. 8	15. 10
19. 35	14. 45
19. 47	13. 5
19. 59	14. 30
20. 31	12. 0
20. 51	16. 0
21. 21	15. 0
21. 31	16. 30
21. 42	15. 45
22. 18	21. 19. 0
22. 30	18. 30
22. 40	20. 0
23. 11	19. 0
23. 59	22. 0
May 29	
0. 0	21. 22. 0
0. 40	24. 50
1. 28	21. 50
2. 12	23. 0
2. 30	21. 0
5. 10	15. 30
9. 54	15. 20
10. 54	13. 30
12. 25	15. 0
13. 18	13. 10
14. 45	15. 10 ***
17. 13	12. 0 ***
18. 56	10. 50 ***
21. 51	18. 40
22. 31	19. 10
23. 30	22. 30
23. 59	22. 55
May 30	
0. 0	21. 22. 55
0. 47	23. 30
4. 4	15. 20
6. 7	14. 30
6. 57	15. 50
9. 43	16. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
May 27	
h m	
5. 53	·0941
6. 20	·0945
7. 6	·0951 ***
8. 58	·0955
9. 15	·0952
10. 0	·0957 ***
11. 36	·0949 ***
12. 50	·0951
13. 12	·0946
13. 27	·0950
14. 4	·0926
14. 47	·0916 (†)
21. 0	·0926
May 28	
0. 0	·0935 ***
2. 26	·0944
2. 47	·0943
3. 9	·0949
3. 27	·0943
3. 45	·0950
4. 7	·0950
4. 20	·0943
4. 47	·0957
5. 10	·0950
5. 30	·0954
5. 51	·0950 ***
8. 45	·0954
9. 10	·0950 ***
14. 45	·0961
15. 15	·0957
16. 0	·0965 ***
17. 16	·0965 ***
20. 16	·0938
20. 32	·0930
20. 46	·0937 ***
21. 30	·0942 ***
23. 0	·0936 ***
23. 59	·0944
May 29	
0. 0	·0944 ***
1. 10	·0943
1. 27	·0949 ***
2. 7	·0953 ***
2. 26	·0947 ***
3. 33	·0957
3. 53	·0951 ***
5. 2	·0958
5. 15	·0956
5. 33	·0959
6. 20	·0954
6. 33	·0959
6. 50	·0959
7. 15	·0957
7. 23	·0959
7. 34	·0956
8. 4	·0960
8. 17	·0957
8. 46	·0960 ***
9. 51	·0962 ***
10. 40	·0955 ***
12. 37	·0959 ***
13. 17	·0956 ***
16. 46	·0957 ***
18. 50	·0958
19. 50	·0942 ***
20. 2	·0936 ***
23. 30	·0941
23. 45	·0948
23. 59	·0949
May 30	
0. 0	·0949
0. 46	·0954
1. 10	·0952
1. 46	·0959
2. 10	·0957
2. 37	·0960

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
May 28	
0. 0	·01790
2. 15	·01753
8. 57⁚	·01512
15. 32	·01911
17. 21	·01788
18. 20	·01785
23. 59	·01498
May 29	
0. 0	·01458
2. 51	·01323
10. 12⁚	·00862
20. 29	·01342
23. 59	·01248
May 30	
0. 0	·01248
1. 22	·01203
6. 44	·00780
9. 30	·00920
12. 30	·01008
17. 16	·01342

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
May 28		
1. 0	58 ·2	58 ·4
3. 0	59 ·3	60 ·0
9. 0	58 ·2	59 ·6
21. 0	53 ·9	54 ·1
May 29		
1. 0	56 ·4	56 ·8
3. 0	57 ·9	58 ·5
9. 0	59 ·3	60 ·7
21. 0	56 ·7	57 ·2
May 30		
0. 0	58 ·0	58 ·6
1. 0	58 ·7	58 ·8
3. 0	60 ·0	61 ·5
6. 0	62 ·4	63 ·0
9. 0	61 ·5	62 ·4
12. 0	60 ·0	61 ·2

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁚ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							H. F. Magnet.	V. F. Magnet.
May 30		May 30		May 30		May 30		
h m	° ′ ″	h m		h m		h m	°	°
9. 58	21. 17. 20	3. 20	·0954	22. 30	·01608	18. 0	[illegible]	[illegible]
10. 51	15. 30		***	23. 59	·01603	21. 0	55·4	55·5
12. 55	15. 0	4. 16	·0962					
13. 9	16. 10	4. 33	·0956					
13. 16	15. 30		***					
13. 24	16. 10	6. 32	·0955					
13. 47	14. 30		***					
15. 21	17. 10	9. 46	·0954					
16. 0	14. 30	10. 11	·0960					
16. 47	10. 30	11. 0:	·0954					
17. 27	8. 45		***					
17. 43	10. 30	11. 58	·0957					
17. 58	9. 0		***					
	***	13. 37	·0955					
18. 30	8. 30		***					
19. 41	9. 50	15. 24	·0967					
22. 9	19. 5		***					
23. 43	27. 10	17. 15	·0960					
23. 59	27. 20	17. 32:	·0964					
		18. 15	·0948					
		20. 32	·0915					
		23. 8	·0913					
			(†)					
May 31		May 31		May 31		May 31		
0. 0	21. 27. 20		(†)	0. 0	·01603	0. 0	57·6	57·7
0. 43	27. 40	1. 32	·0987	3. 15	·01630	1. 0	58·1	58·3
0. 57	26. 0	2. 2	·1002	8. 27	·01560	3. 0	59·0	59·4
1. 12	26. 45	2. 30	·0982	14. 39	·01672	9. 0	60·0	61·0
1. 50	24. 50		***	14. 51	·01643	21. 0	59·0	59·3
2. 11	25. 15	3. 31	·0994	15. 37	·01672			
2. 35	23. 0	3. 58	·1005	23. 59	·01340			
3. 49	20. 35	4. 9	·1001					
3. 58	21. 0	4. 18	·1003					
4. 14	19. 55	4. 56	·0990					
4. 22	20. 10	5. 0	·0998					
4. 53	18. 30	5. 7	·0994					
5. 7	19. 30	5. 24	·0996					
5. 46	17. 40	5. 45	·0985					
6. 51	17. 20	6. 5	·0981					
9. 44	22. 0	6. 59	·0995					
10. 13	21. 10	7. 17	·0988					
10. 36	18. 30	8. 4	·0992					
10. 55	18. 50		***					
11. 30	15. 50	9. 20	·0990					
12. 30	19. 0		***					
14. 26	19. 55	9. 55	·0995					
14. 55	18. 50	10. 5	·0990					
15. 48	13. 30	10. 20	·0991					
	***	10. 55	·0980					
16. 51	16. 0	11. 4	·0985					
17. 20	15. 50	11. 23	·0979					
18. 10	13. 10		***					
18. 47	13. 45	16. 45	·0984					
19. 12	12. 30	17. 46	·0979					
19. 44	14. 5		***					
20. 39	15. 0	19. 10	·0962					
22. 0	21. 20	19. 40	·0969					
22. 36	21. 30	20. 22	·0961					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							H. F. Magnet.	V. F. Magnet.
May 31		May 31						
23. 59	21. 2[illegible]. 0	23. 15	·0948	[illegible]		[illegible]		
		23. 59	·0961					
June 1		June 1		June 1		June 1		
0. 0	21. 2[illegible]. 0	0. 0	·0962	0. 0	[illegible]	1. 0	63·0	[illegible]
1. 0	23. 35	1. 28	·0969	1. 15	[illegible]	3. 0	[illegible]	[illegible]
3. 27	17. 30	2. 11	·0976	[illegible]	[illegible]	9. 0	65·2	[illegible]
4. 1[illegible]	16. 1	2. 32	·0971	19. 42	[illegible]	21. 0	[illegible]	[illegible]
4. 54	11. 40	2. 53	·0972	23. 0	·01[illegible]12			
5. 15	13. 10	3. 1[illegible]	·0970	23. 59	[illegible]			
7. 11	14. 15	3. 19	·0977					
7. 40	16. [illegible]	3. 45	·0986					
8. 47	16. 0	4. 10	·0988					
10. 12	17. 30	4. 30	·0979					
10. 25	16. 20	4. 40	·0977					
10. 30	17. [illegible]	4. 47	·0992					
1[illegible]. 51	1[illegible]. 10	4. 5[illegible]	·0978					
15. 13	16. 30	5. 35	[illegible]					
16. 44	14. 50	5. 58	·0984					
16. 53	14. 30	6. 7	·0989					
18. 15	11. 10		***					
19. [illegible]5	10. 50	7. 5[illegible]	·0968					
20. 30	13. 0	8. 16	·0971					
22. 17	19. 0	9. 8	·0966					
23. 11	24. 30		***					
	(†)	10. 45	·0973					
		11. 15	·0970					
		15. 40:	·0978					
		18. 30	·0972					
		21. 0:	·0956					
		22. 20	·0956					
		23. 0	·0961					
			(†)					
June 2		June 2		June 2		June 2		
	(†)		(†)	0. 0	[illegible]	1. 0	[illegible]	[illegible]
1. 0	21. 25. 39*	1. 0	·0971*		(†)	3. 0	[illegible]	[illegible]
3. 0	23. 3[illegible]	3. 0	[illegible]	1. 0	·01417*	[illegible]	[illegible]	[illegible]
5. 54	16. 50	6. 0	·0976	3. 0	·01407*	22. 3[illegible]	56·[illegible]	[illegible]
7. 0	16. 45	7. [illegible]	·0976	5. 45	[illegible]			
9. 15	18. 50	7. 29	·0980	7. 28	·01452			
10. 56	19. 30	9. 55	·0979	8. 29	·01373			
15. 28	17. 20	11. 16	·0983	13. 42	·01178			
16. 43	15. 0	16. 50	·0987		·01026			
17. 0	13. 0	20. 48	·0963	16. 30	·011[illegible]3			
18. 51	9. 30	21. 55	·0962	23. 59	·00738			
19. 19	10. 30	22. 15	·0966					
19. 29	9. 30	22. 31	·0963					
20. 45	13. 0	23. 25	·0969					
21. 28	16. 20	23. 59	·0970					
22. 4	16. 30							
23. 51	24. 50							
23. 59	24. 20							
June 3		June 3		June 3		June 3		
0. 0	21. 24. 20	0. [illegible]	·0970	0. 0	·00738	[illegible]	[illegible]	[illegible]
1. 2[illegible]	26. 0	0. 41	·0969	[illegible]	[illegible]	21. 0	[illegible]	[illegible]
1. 35	25. 30	1. 25	[illegible]		[illegible]			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
June 3	
h m	° ′ ″
2. 41	21. 25. 20
3. 54	23. 0
5. 11	18. 50
5. 29	18. 55
6. 57	16. 0
13. 13	17. 15
15. 29	16. 5
16. 45	13. 35
17. 29	8. 45
18. 2	12. 30
18. 25	10. 30
18. 45	13. 20
19. 23	11. 0
19. 48	12. 30
20. 14	11. 30
20. 44	13. 55
21. 7	13. 30
22. 44	21. 20
23. 59	27. 50
June 4	
0. 0	21. 27. 50
0. 20	28. 55
1. 45	28. 40
2. 5	28. 15
5. 54	16. 40
5. 58	16. 55
6. 28	14. 35
7. 11	14. 0
7. 51	15. 50
8. 43	16. 40
8. 57	10. 0
9. 28	10. 20
11. 7	15. 40
11. 16	15. 0
11. 37	16. 20
11. 44	15. 40
11. 57	17. 0
12. 10	16. 30
12. 26	17. 20
13. 51	16. 10
14. 28	19. 0
15. 44	15. 30
16. 27	15. 0
17. 1	13. 45
17. 26	16. 20
17. 48	14. 5
17. 53	14. 30
18. 10	13. 30
18. 23	13. 10
19. 11	8. 30
19. 47	7. 50
June 4	
h m	° ′ ″
20. 10	21. 9. 0
20. 45	13. 30
21. 6	14. 30
21. 21	13. 40
22. 40	19. 0
23. 59	27. 0
June 5	
0. 0	21. 27. 0
0. 49	27. 5
0. 57	26. 10
1. 56	27. 45
2. 43	24. 0
3. 11	22. 50
3. 19	23. 30
3. 44	20. 25
4. 10	19. 0
5. 33	18. 0
6. 30	16. 20
7. 0	15. 0
7. 38	15. 35
7. 51	14. 50
8. 22	14. 55
9. 7	9. 30
9. 42	14. 10
9. 58	14. 15
10. 11	15. 45
11. 5	15. 55
11. 53	14. 20
12. 26	19. 0
13. 0	13. 45
14. 24	16. 20
15. 43	16. 0 ***
18. 18	9. 50
18. 30	10. 30
18. 41	9. 40
18. 44	10. 5
18. 50	9. 0
18. 58	10. 0
19. 15	7. 40
19. 30	9. 30
19. 42	8. 50 ***
20. 41	12. 15
20. 59	12. 10
21. 40	14. 55
21. 51	14. 30
23. 17	25. 0
23. 33	25. 0
23. 46	26. 10
23. 59	26. 40
June 6	
0. 0	21. 26. 40
0. 19	26. 45 (†)
1. 0	27. 1*

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
June 3	
h m	
1. 15	·0977
2. 35	·0987
3. 30	·0988
4. 10	·0985
4. 23	·0988
5. 15	·0988
5. 45	[illegible] ***
6. 8	·0988
6. 25	·0985
6. 45	·0987
7. 11	·0986 ***
10. 30	·0987 ***
17. 0	·0984 ***
18. 25	·0972
18. 39	·0980
18. 45	·0976
18. 50	·0981
19. 15	·0970
20. 16	·0958
22. 43	·0941
23. 59	·0952
June 4	
0. 0	·0952
0. 35	·0952
1. 30	·0963
2. 5	·0976
2. 55	·0980
3. 6	·0976
3. 42	·0982
3. 48	·0980
4. 40	·0986
5. 0	·0981
5. 13	·0991
5. 46	·0979
6. 9	·0988 ***
7. 2	·0978
7. 17	·0986
7. 52	·0981
8. 37	·0988
9. 15	·0970 ***
11. 6	·0967 ***
12. 38	·0975 ***
13. 15	·0970
13. 57	·0977 ***
17. 56	·0972
19. 30	·0950
20. 33	·0953 ***
June 4	
h m	
21. 36	·0937 ***
23. 0	·0946
23. 10	·0941 ***
23. 59	·0940
June 5	
0. 0	·0940 ***
0. 55	·0944
1. 17	·0959
1. 52	·0966
2. 20	·0957
2. 45	·0971
3. 17	·0977
4. 20:	·0959
5. 56	·0977
6. 17	·0976
6. 36	·0979
7. 17	·0960
7. 40	·0968
8. 20	·0968
8. 37	·0959
9. 10	·0968
9. 51	·0962
10. 23	·0969
11. 50	·0971
12. 22:	·0960
12. 56	·0970
17. 40	·0977 ***
19. 52	·0962
22. 33	·0963
23. 15:	·0956
23. 59	·0967
June 6	
0. 0	·0967 ***
3. 4	·0979
3. 38	·0971

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
June 3	
h m	
3. 45	·00943
11. 41:	·00639
20. 43	·00924
23. 59	·00770
June 4	
0. 0	·00770
5. 57	·00450
7. 40	·00526
12. 27:	·00633
17. 37	·00982
21. 11	·01183
23. 59	·01100
June 5	
0. 0	·01100
9. 45:	·00624
20. 22	·01330
21. 6	{·01265 {·01128
23. 59	·01203
June 6	
0. 0	·01203*
1. 0	·01186*
3. 0	·01108*
9. 0	·00710*

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
June 4		
1. 0	63·2	62·9
3. 0	64·3	64·4
9. 0	63·9	64·8
21. 0	57·3	58·5
June 5		
1. 0	61·2	61·8
3. 0	63·0	63·0
9. 0	63·7	64·1
21. 0	56·3	57·2
June 6		
0. 0	57·3	58·1
1. 0	58·0	58·
3. 0	59·0	60·0
6. 0	62·0	62·0

These indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

June 6. The Photographic Trace for the Vertical Force Magnet was too faint for use.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 6		June 6		June 6		June 6		
h m	° ′ ″	h m		h m		h m	°	°
3. 0	21. 25. 56*	3. 51	·0983	21. 0	·01099*	9. 0	62·5	62·5
6. 10	16. 0	4. 13	·0979			12. 0	62·0	61·9
8. 38	15. 50	4. 40	·0983			18. 0	58·0	58·8
10. 55	17. 55	4. 52	·0979			21. 0	58·0	59·0
11. 18	15. 30		***					
11. 33	16. 20	6. 45	·0986					
11. 59	12. 40		***					
	***	10. 0	·0969					
12. 43	14. 15	11. 33	·0972					
13. 3	12. 30	12. 10	·0977					
14. 11	15. 45		(†)					
14. 28	14. 50	19. 15	·0966					
15. 2	17. 45		***					
15. 17	16. 40	22. 5	·0948					
15. 30	17. 25	22. 23	·0952					
16. 10	14. 10		***					
16. 15	16. 0	23. 15	·0951					
16. 32	14. 0	23. 59	·0963					
16. 41	14. 55							
17. 24	11. 45							
18. 10	14. 0							
	***							
19. 26	8. 30							
	***							
20. 4	10. 20							
20. 16	9. 30							
	***							
21. 50	14. 50							
23. 0	21. 20							
	(†)							
June 7		June 7		June 7		June 7		
	(†)	0. 0	·0963		(†)	0. 0	58·3	58·8
0. 30	21. 26. 40	1. 37	·0970	0. 29	·01193	1. 0	58·7	58·2
1. 12	29. 30	1. 51	·0967	1. 30	·01228	3. 0	59·8	59·3
1. 46	29. 30		***	4. 45	·01140	9. 0	60·0	60·3
3. 42	22. 20	2. 34	·0971	11. 42	·01050	21. 0	57·0	58·0
4. 24	18. 30	2. 53	·0967	18. 13	·01360			
6. 44	16. 40	3. 16	·0973	18. 22	·01322			
9. 28	17. 30	3. 35	·0969	20. 13	·01360			
9. 59	9. 30	4. 4	·0989	21. 0	·01300 ·01128			
10. 30	14. 20	4. 17	·0991					
10. 44	14. 30	5. 20	·0979	23. 59	·00961			
11. 15	12. 20	5. 43	·0983					
11. 30	12. 55	6. 7	·0979					
12. 2	11. 10	7. 4	·0984					
13. 30	15. 15	7. 47	·0982					
15. 0	15. 20	8. 2	·0977					
15. 49	17. 10	8. 25	·0981					
16. 16	16. 0	9. 46	·0971					
16. 42	16. 15	10. 7	·0979					
17. 41	11. 30	10. 25	·0971					
18. 13	9. 45	10. 40	·0972					
19. 14	11. 0	11. 5	·0966					
19. 41	9. 55	11. 24	·0971					
19. 50	11. 0	11. 46	·0963					
20. 17	10. 40	13. 15	·0964					
20. 30	12. 30		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 7		June 7						
h m	° ′ ″	h m		h m		h m	°	°
20. 45	21. 12. 0	14. 4	·0970					
23. 59	24. 30	15. 0	·0971					
		15. 47	·0976					
		16. 40	·0973					
		17. 6	·0974					
		19. 33	·0959					
		20. 53	·0955					
			***					
		22. 20	·0937					
			***					
		23. 59	·0958					
June 8		June 8		June 8		June 8		
0. 0	21. 24. 30	0. 0	·0958	0. 0	·00961	1. 0	61·0	61·3
0. 16	25. 15	0. 32	·0966	4. 26	·00590	3. 0	63·3	63·7
0. 30	22. 20	0. 48	·0964	7. 39	·00874	9. 0	64·8	65·2
1. 14	24. 40	1. 46	·0984	10. 16	·00995	21. 0	59·0	60·0
1. 54	22. 50		***	12. 27	·01111			
2. 40	23. 0	2. 17	·0974	13. 56	·01070			
5. 41	14. 0	2. 30	·0979	20. 29	·01442			
8. 59	14. 15	3. 3	·0984	23. 59	·01488			
9. 45	10. 30		***					
10. 15	15. 20	3. 45	·0977					
10. 45	8. 40	5. 0	·0986					
11. 16	16. 5	5. 21	·0991					
11. 57	10. 30	6. 35	·0990					
12. 20	12. 20	6. 54	·0984					
12. 48	11. 30	7. 5	·0987					
15. 39	11. 50	7. 26	·0979					
16. 17	14. 30	7. 50	·0986					
17. 39	11. 30		***					
17. 52	10. 25	10. 5	·0965					
18. 9	11. 0	10. 40	·0971					
18. 21	9. 20	11. 2	·0965					
19. 30	8. 30	11. 19	·0968					
20. 12	10. 20	11. 40	·0965					
20. 39	9. 0	12. 5	·0974					
20. 55	14. 15	13. 13	·0971					
21. 56	11. 40	13. 40	·0976					
23. 18	18. 30	15. 4	·0974					
23. 45	22. 30	15. 55	·0978					
23. 59	21. 55	16. 51	·0970					
			***					
		18. 8	·0972					
		19. 50	·0961					
		21. 21	·0961					
			***					
		23. 23	·0975					
		23. 47	·0988					
		23. 59	·0980					
June 9		June 9		June 9		June 9		
0. 0	21. 21. 55	0. 0	·0979	0. 0	·01488	1. 0	59·3	60·2
0. 36	22. 0	0. 8	·0973	2. 14	·01508	3. 0	60·0	60·8
0. 45	23. 30	0. 35	·0973	4. 12	·01450	9. 0	60·5	61·5
1. 49	23. 0	0. 46	·0984	10. 9	·01474	22. 15	58·2	58·6
2. 44	21. 0	1. 38	·0966	13. 54	·01520			
3. 0	21. 20	2. 22	·0975	15. 45	·01630			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 9		June 9		June 9				
h m	° ′ ″	h m		h m		h m	°	°
3. 15	21. 20. 30	2. 37	·0974	17. 38	·01688			
3. 31	21. 0	3. 32	·0987	20. 39	·01802			
4. 27	18. 0	3. 49	·0982	23. 59	·01633			
8. 10	15. 0	4. 4	·0984					
10. 45	16. 0	4. 26	·0981					
10. 59	14. 55		***					
11. 51	14. 5	5. 36	·0997					
11. 59	15. 0		***					
12. 29	14. 30	6. 8	·0984					
13. 15	16. 15		***					
13. 40	18. 20	7. 25	·0989					
14. 14	19. 0		***					
14. 48	10. 30	11. 43	·0981					
15. 9	10. 0		***					
15. 43	12. 50	13. 30:	·0992					
16. 29	10. 50	13. 52	·0985					
16. 54	12. 30	14. 23	·0987					
17. 12	18. 0	14. 50	·0977					
17. 44	13. 30		***					
17. 51	15. 50	16. 6	·0983					
17. 57	14. 0		***					
18. 0	14. 30	18. 17	·0986					
18. 47	10. 30		***					
19. 19	9. 30	21. 30	·0959					
	***		***					
20. 54	12. 20	23. 7	·0969					
22. 44	18. 30	23. 23	·0960					
23. 11	21. 20	23. 40	·0948					
23. 59	22. 30	23. 59	·0964					
June 10		June 10		June 10		June 10		
0. 0	21. 22. 30	0. 0	·0965	0. 0	·01633	8. 20	61 ·8	63 ·0
0. 38	24. 40	0. 38	·0978	2. 11	·01625	21. 0	57 ·0	58 ·0
1. 54	24. 50	1. 15	·0985	6. 27	·01424			
2. 27	22. 30		***	10. 15	·01300			
3. 19	22. 10	2. 10	·0996	13. 23	·01349			
5. 34	17. 30	2. 43	·0981	14. 18	·01315			
12. 45	15. 30		***	16. 35	·01510			
12. 49	18. 30	5. 17	·0991	19. 0	·01701			
13. 4	14. 0		***	21. 15	·01518			
13. 24	21. 17. 0	8. 45	·0981	23. 59	·01500			
14. 20	20. 58. 40		***					
14. 43	21. 17. 0	12. 40	·0981					
15. 17	6. 30	12. 47	·1008					
15. 59	3. 25	13. 6	·0989					
16. 30	7. 0		***					
16. 48	6. 15	13. 33	·1010					
17. 10	8. 30	14. 36	·0949					
17. 28	14. 30	14. 56	·0978					
17. 42	12. 30		***					
17. 59	15. 50	16. 11	·0994					
18. 13	12 10		***					
18. 44	10. 30	17. 15:	·0969					
18. 51	13. 20		***					
19. 12	13. 20	18. 6:	·0991					
19. 27	10. 30		***					
	***	19. 27	·0944					
20. 50	21. 50		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 10		June 10						
h m	° ′ ″	h m		h m		h m	°	°
21. 5	21. 20. 30	20. 30	·0946					
	***	20. 48	·0955					
22. 44	25. 30		***					
23. 3	28. 10	21. 47:	·0940					
23. 39	26. 30		***					
23. 45	28. 0	22. 40	·0950					
23. 54	26. 15	22. 51	·0941					
23. 59	26. 15		***					
		23. 27	·0945					
		23. 46	·0960					
			(†)					
June 11		June 11		June 11		June 11		
0. 0	21. 26. 15	1. 0	·0987*	1. 0	·01203*	1. 0	60 ·0	61 ·0
1. 0	28. 45*	3. 0	·0968*	3. 0	·01335*	3. 0	62 ·7	63 ·0
3. 0	20. 52*	9. 0	·0957*	9. 0	·00754*	9. 0	65 ·0	65 ·0
9. 0	13. 46*	21. 0	·0938*	21. 0	·01248*	21. 0	61 ·0	60 ·7
21. 0	12. 14*							
June 12		June 12		June 12		June 12		
1. 0	21. 19. 7*	0. 0	·0950	0. 0	·01280	1. 0	61 ·6	61 ·7
3. 0	19. 29*	0. 15	·0954	3. 57	·01451	3. 0	62 ·2	62 ·3
9. 0	12. 19*	0. 50	·0945	10. 51	·01356	9. 0	62 ·3	62 ·9
21. 0	12. 21*	3. 47	·0961	12. 52	·01410	21. 0	58 ·9	58 ·6
			(†)	17. 50	·01696			
		9. 0	·0970*	19. 51	{·01590			
		21. 0	·0979*		·01448			
				22. 27	·01440			
				23. 59	·01388			
June 13		June 13		June 13		June 13		
	(†)		(†)	0. 0	·01388	0. 0	61 ·2	60 ·8
0. 31	21. 18. 30	0. 23	·0958	1. 30	·01250	1. 0	62 ·2	61 ·6
2. 22	21. 0	0. 52	·0967	7. 9	·00782	3. 0	64 ·0	63 ·7
3. 23	19. 50	1. 52	·0959	8. 57	·00868	6. 0	64 ·5	63 ·6
4. 17	16. 10	2. 19	·0966	13. 18	·01000	9. 10	64 ·0	63 ·3
5. 11	14. 10	2. 42	·0959	20. 28	·01522	12. 0	62 ·5	62 ·5
5. 57	14. 0	3. 17	·0968	23. 59	·01426	18. 0	56 ·7	57 ·2
6. 26	12. 35		***			21. 0	58 ·9	58 ·3
9. 15	13. 45	4. 46	·0965					
9. 45	15. 45		***					
10. 14	10. 15	6. 52	·0959					
10. 53	12. 20	7. 45	·0947					
11. 58	10. 30	8. 17	·0950					
12. 25	11. 30	8. 42	·0947					
13. 10	10. 0	9. 40	·0960					
15. 19	11. 30		***					
15. 38	10. 20	11. 20	·0952					
17. 5	9. 10		***					
18. 40	9. 30	17. 20	·0965					
19. 7	8. 0		***					
	***	19. 15	·0945					
19. 56	9. 50		***					
20. 15	12. 30	21. 46	·0936					
20. 24	12. 0	22. 20	·0941					
21. 15	14. 10	23. 59	·0939					
21. 28	16. 30							
23. 59	21. 15							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the readings will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

June 11. The Photographic Traces were too faint for use.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 14		June 14		June 14		June 14		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 21. 15	0. 0	·0939	0. 0	·01426	0. 0	61·0	60·4
0. 23	22. 10		***	0. 59	·01390	1. 0	61·7	61·2
2. 30	21. 15	3. 45	·0957	6. 13	·00886	3. 0	63·3	62·6
3. 27	18. 10		***	7. 46	·01011	9. 0	64·2	64·3
3. 44	18. 10	6. 2	·0960	12. 0	·01147	21. 0	57·0	57·7
4. 52	14. 55		***	19. 29	·01730			
6. 51	11. 50	8. 40	·0952	21. 10	·01788 ·01862			
9. 10	13. 30	10. 46	·0957					
10. 19	13. 20	11. 50	·0954	23. 59	·01850			
10. 30	14. 10		***					
11. 35	13. 20	14. 32	·0960					
11. 58	11. 30	14. 53	·0968					
12. 14	12. 30		***					
12. 28	11. 30	17. 34	·0961					
14. 21	12. 0		***					
14. 56	15. 0	18. 37	·0968					
15. 19	12. 30	20. 11	·0968					
16. 40	8. 30	22. 1	·0952					
16. 52	8. 40		***					
17. 28	5. 50	23. 59	·0956					
18. 10	12. 30							
18. 24	12. 35							
	***							
18. 43	14. 30							
18. 54	13. 0							
19. 0	15. 0							
19. 14	12. 30							
	***							
21. 11	12. 0							
21. 58	15. 0							
22. 14	13. 50							
22. 41	16. 50							
23. 59	19. 30							
June 15		June 15		June 15		June 15		
0. 0	21. 19. 30	0. 0	·0956	0. 0	·01850	1. 0	59·0	60·0
1. 23	22. 20	0. 56	·0970	3. 16	·01733	3. 0	61·0	61·7
3. 43	17. 55		***	6. 29	·01395	9. 0	64·0	65·0
6. 0	15. 0	2. 32	·0979	10. 8	·01137 ·01170	21. 0	60·7	60·8
6. 11	16. 20		***					
6. 50	15. 10	3. 26	·0978	13. 40	·01240			
8. 2	14. 45	3. 40	·0987	20. 24	·01552			
8. 13	13. 45		***	22. 41	·01590			
	***	5. 50	·0979	23. 59	·01466			
15. 21	12. 50	6. 2	·0993					
15. 32	11. 30		***					
18. 0	6. 50	6. 53	·0976					
	***		***					
20. 40	12. 30	7. 46	·0978					
21. 33	12. 30	8. 2	·0978					
23. 59	19. 20	8. 11	·0976					
			***					
		9. 22	·0968					
		9. 33	·0978					
		9. 40	·0969					
		9. 52	·0977					
		10. 2	·0968					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		June 15						
h m	° ′ ″	h m		h m		h m	°	°
		13. 6	·0977					
			***					
		16. 33	·0976					
			***					
		21. 0	·0958					
		23. 59	·0957					
June 16		June 16		June 16		June 16		
0. 0	21. 19. 20	0. 0	·0957	0. 0	·01466	1. 0	64·0	64·7
1. 40	21. 0		***	3. 6	·01170 ·01242	3. 0	65·0	66·0
3. 15	18. 30	1. 40	·0960			9. 0	65·6	66·2
5. 45	11. 30	3. 4	·0971	3. 41	·01222 ·01268	22. 45	60·0	61·7
7. 24	10. 10	4. 32	·0971					
	***	5. 20	·0965	5. 22	·01300			
12. 58	13. 0	5. 50	·0970	8. 32	·01400			
15. 10	12. 30		***	12. 9	·01502			
	***	7. 32	·0964	15. 43	·01642			
18. 14	5. 30		***	21. 1	·01967			
18. 31	6. 30	17. 20	·0974	23. 59	·02102			
18. 45	5. 50		***					
19. 14	8. 20	20. 36	·0956					
19. 24	7. 30	22. 10	·0954					
19. 49	10. 15	23. 17	·0960					
20. 20	8. 40	23. 59	·0961					
23. 10	20. 40							
23. 59	22. 20							
June 17		June 17		June 17		June 17		
0. 0	21. 22. 20	0. 0	·0961	0. 0	·02102	8. 5	59·7	60·2
0. 41	22. 30	0. 30	·0958	7. 22	·02470	21. 0	57·6	58·2
1. 47	24. 20	1. 42	·0971	22. 30	·01872 ·01820			
3. 26	21. 30	2. 37	·0972					
4. 27	18. 0	3. 2	·0964	23. 59	·01803			
4. 52	17. 55	3. 57	·0972					
5. 43	14. 0	4. 6	·0970					
	***	5. 8	·0991					
8. 55	15. 5	5. 33	·0988					
9. 14	16. 15	6. 0	·0988					
14. 21	13. 40	6. 10	·0993					
14. 43	16. 0		***					
15. 0	15. 0	6. 43	·1001					
15. 29	15. 0		***					
16. 15	12. 30	9. 32	·0989					
16. 43	13. 10		***					
	***	13. 45	·0984					
17. 37	9. 20		***					
	***	15. 50	·0995					
17. 59	10. 0		***					
18. 25	7. 30	17. 10	·0990					
	***		***					
19. 25	7. 20	22. 15	·0950					
20. 58	12. 0	23. 59	·0963					
22. 5	19. 0							
23. 59	23. 30							
June 18		June 18		June 18		June 18		
0. 0	21. 23. 30	0. 0	·0963	0. 0	·01803	1. 0	61·0	61·7
1. 27	26. 15	0. 26	·0967	1. 23	·01700	3. 0	64·0	65·0
			***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 18		June 18		June 18		June 18		
h m	° ′ ″	h m		h m		h m	°	°
5. 0	21. 16. 0	1. 40	·0960	2. 13	·01618	9. 20	68·2	68·8
5. 52	15. 45	2. 24	·0967	5. 57	·00922	21. 0	59·8	60·7
6. 44	13. 15		***	8. 41	·01228			
7. 28	13. 20	3. 4	·0956	12. 42:	·01369			
7. 45	12. 15		***	19. 32	·01728			
8. 26	13. 50	4. 50	·0965	23. 59	·02103			
8. 55	11. 30	5. 32	·0984					
9. 12	12. 40		***					
9. 19	11. 30	7. 5	·0985					
9. 24	13. 10	7. 22	·0978					
10. 7	12. 0	7. 40	·0984					
10. 23	13. 40	8. 36	·0964					
10. 51	11. 20	8. 45	·0970					
11. 14	6. 20	9. 0	·0955					
11. 44	11. 30	9. 13	·0964					
11. 59	10. 0	9. 27	·0958					
12. 44	13. 30		***					
13. 10	13. 45	10. 11	·0964					
13. 29	11. 30	10. 33	·0956					
13. 58	14. 30	11. 2	·0974					
14. 16	14. 30	11. 15	·0964					
14. 39	12. 0	11. 36	·0953					
15. 16	12. 30	11. 45	·0960					
15. 45	11. 0	12. 3	·0955					
16. 15	13. 15		***					
16. 36	10. 25	12. 50	·0967					
16. 43	11. 0		***					
17. 27	8. 0	13. 18	·0966					
17. 42	9. 30	13. 27	·0956					
18. 44	8. 0	13. 45	·0967					
18. 51	6. 40	14. 28	·0973					
19. 15	8. 45	16. 28	·0968					
19. 41	8. 30	17. 30	·0974					
20. 26	9. 0	18. 15	·0965					
21. 6	13. 45	20. 20	·0960					
21. 40	13. 0	21. 27	·0949					
22. 22	13. 50	21. 46	·0952					
23. 59	23. 40	22. 7	·0949					
		23. 10	·0953					
		23. 59	·0957					
June 19		June 19		June 19		June 19		
0. 0	21. 23. 40	0. 0	·0957	0. 0	·02103	1. 0	61·3	62·2
1. 11	24. 30	0. 43	·0970	1. 30	·02110	3. 0	63·0	63·7
4. 7	17. 0	1. 0	·0964	6. 37	·01927	9. 0	64·0	64·8
6. 26	13. 45	1. 26	·0969	12. 44	·01922	21. 0	62·0	62·4
7. 50	13. 30	2. 0	·0976	19. 13:	·02228			
8. 13	14. 15	2. 26	·0977	23. 59	·02185			
8. 46	13. 30	2. 52	·0971					
10. 14	16. 20	3. 46	·0977					
11. 21	15. 45	4. 6	·0975					
12. 5	10. 30	4. 32	·0983					
12. 58	14. 15	5. 36	·0984					
13. 59	15. 5	6. 4	·0990					
14. 51	14. 5	6. 42:	·0975					
15. 12	14. 50	7. 17	·0983					
15. 51	13. 20		***					
16. 16	13. 10	9. 15	·0973					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 19		June 19						
h m	° ′ ″	h m		h m		h m	°	°
16. 52	21. 10. 30	11. 46	·0974					
18. 41	8. 30	12. 20	·0978					
20. 25	10. 0	13. 0	·0966					
23. 59	21. 0	17. 30	·0976					
		21. 7	·0950					
			***					
		23. 59	·0953					
June 20		June 20		June 20		June 20		
0. 0	21. 21. 0	0. 0	·0953	0. 0	·02185	0. 0	64·0	64·8
1. 11	22. 5		***	1. 20	{ ·02112 ·02164	1. 0	64·7	65·0
3. 24	20. 10	3. 32	·0968			3. 0	66·0	67·0
5. 15	16. 0	3. 58	·0960	3. 49	·01980	6. 0	67·3	67·5
7. 42	14. 0	5. 17	·0972	10. 55:	·01660	9. 0	67·8	68·0
9. 58	16. 30	5. 30	·0970	19. 5	·02148	12. 0	66·5	66·3
13. 35	14. 50	6. 26	·0976	23. 59	·02257	18. 0	61·7	62·1
15. 42	12. 50		***			21. 0	61·3	62·2
16. 11	11. 5	9. 0	·0968					
16. 29	11. 40	12. 30	·0967					
17. 54	7. 50	12. 40	·0976					
18. 16	9. 0	12. 50	·0970					
18. 32	7. 40	16. 40:	·0977					
20. 28	11. 0	20. 33	·0954					
21. 46	14. 0	21. 47	·0950					
22. 11	16. 30	22. 30	·0945					
23. 43	21. 10		***					
23. 59	21. 20	23. 59	·0962					
June 21		June 21		June 21		June 21		
0. 0	21. 21. 20	0. 0	·0962	0. 0	·02257	0. 0	63·6	64·0
0. 12	21. 50	0. 30	·0962	8. 57	·01769	1. 0	64·7	64·9
0. 19	26. 30	0. 54	·0979	11. 30	·01720	3. 0	66·0	67·0
1. 0	23. 45	1. 46:	·0970	12. 45	·01748	9. 0	67·2	68·1
1. 14	22. 40	2. 40	·0985	13. 11	·01712	21. 0	62·0	63·0
1. 39	22. 50	3. 45:	·0950	14. 36	·01784			
1. 51	23. 45	4. 26	·0967	17. 26	·02046			
2. 50	22. 50		***	20. 21	·02210			
3. 35	19. 30	5. 10	·0967	20. 42	·02250			
4. 15	18. 45		***	23. 59	·02180			
5. 57	13. 30	6. 0	·0974					
6. 10	14. 0	6. 36	·0989					
7. 5	12. 30	7. 3	·0971					
8. 44	19. 30		***					
9. 20	13. 50	8. 36	·0973					
9. 46	14. 30	9. 0	·0965					
10. 13	16. 50	10. 20	·0973					
11. 14	13. 35	10. 36	·0970					
11. 21	14. 55	10. 47	·0973					
11. 54	12. 10	11. 2	·0967					
	***	11. 17	·0973					
12. 42	14. 30		***					
12. 57	20. 25	12. 36	·0966					
13. 28	13. 30	12. 54	·0979					
13. 42	14. 15	13. 37	·0960					
14. 9	12. 0	14. 28	·0969					
14. 13	13. 0	15. 6	·0960					
14. 26	11. 15	18. 30	·0966					
14. 36	12. 0	19. 6	·0964					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 21		June 21						
h m	° ′ ″	h m		h m		h m	°	°
15. 0	21. 8. 30	19. 38	·0956					
	***		***					
15. 39	12. 0	23. 15	·0934					
	***		(†)					
16. 22	10. 0							
19. 5	8. 0							
19. 27	10. 30							
19. 45	10. 0							
19. 56	11. 0							
20. 1	10. 0							
20. 23	12. 30							
20. 54	12. 0							
21. 42	13. 5							
22. 11	15. 10							
23. 30	22. 45							
23. 59	23. 40							
June 22		June 22		June 22		June 22		
0. 0	21. 23. 40	1. 0	·0939*	0. 0	·02180	1. 0	65·3	66·0
0. 29	23. 0	3. 0	·0956*	1. 10	·02135	3. 0	67·7	68·0
0. 44	23. 50	9. 0	·0953*	5. 37	·01570	9. 0	68·1	68·5
2. 48	21. 40	21. 0	·0950*	8. 22	·01346	21. 0	62·7	63·0
6. 16	11. 10			12. 42	·01470			
9. 39	12. 20			19. 29	·01948			
10. 10	13. 15			23. 59	·02138			
15. 30	13. 10							
17. 19	9. 5							
17. 41	6. 0							
17. 58	8. 0							
18. 10	6. 50							
19. 7	4. 55							
19. 18	5. 50							
19. 26	5. 35							
19. 44	7. 0							
19. 54	6. 0							
20. 39	10. 0							
21. 28	10. 0							
22. 55	17. 45							
23. 59	21. 50							
June 23		June 23		June 23		June 23		
0. 0	21. 21. 50		(†)	0. 0	·02138	1. 0	64·7	64·8
0. 38	23. 30	0. 4	·0954	1. 49	·02126	3. 0	66·5	67·2
1. 9	23. 50	2. 13	·0970	11. 48:	·01516	9. 0	69·0	69·2
1. 51	22. 0	2. 22	·0967	19. 36	·01775	21. 25	65·0	66·0
2. 13	22. 0	2. 47	·0975	23. 59	·01808			
2. 25	21. 0		***					
2. 56	20. 55	3. 36	·0973					
3. 34	19. 0	3. 50	·0980					
3. 44	19. 30		***					
4. 40	17. 30	6. 56	·0982					
5. 12	17. 15	8. 22	·0971					
5. 39	16. 10	13. 50	·0971					
8. 24	14. 10	16. 43	·0977					
15. 50	13. 10	19. 41	·0954					
16. 45	11. 45	20. 3	·0955					
18. 7	7. 10	21. 22	·0946					
18. 40	6. 30		***					
21. 13	21. 7. 50	23. 59	·0951					
23. 59	20. 15							
June 24		June 24		June 24		June 24		
0. 0	21. 20. 15	0. 0	·0951	0. 0	·01808	8. 29	69·4	69·7
1. 27	22. 40		***	2. 52	·01696	21. 0	62·3	63·0
3. 13	20. 30	0. 57	·0953	5. 46	·01506			
3. 44	18. 10	1. 26	·0968	10. 0	·01400			
4. 28	18. 55	2. 10	·0956	14. 48	·01633			
4. 47	16. 50	2. 52	·0976	23. 21	·02410			
	***	3. 5	·0970	23. 59	·02340			
6. 45	16. 10	3. 26	·0990					
7. 10	17. 30	3. 45	·0975					
7. 55	15. 30	3. 52	·0984					
8. 15	16. 10	4. 17	·0976					
8. 31	15. 30	4. 36	·0982					
8. 47	17. 15	4. 53	·0964					
9. 15	15. 30		***					
9. 45	16. 30	5. 40	·0976					
10. 0	15. 50		***					
11. 44	16. 30	10. 37	·0958					
12. 39	13. 40		***					
13. 9	18. 0	12. 10	·0971					
13. 18	16. 30	12. 33	·0962					
13. 55	18. 10	13. 10	·0970					
14. 13	16. 0	13. 36	·0965					
	***		***					
14. 51	17. 55	17. 15	·0976					
15. 10	16. 0		***					
15. 30	15. 0	18. 40	·0974					
15. 47	17. 0		***					
16. 13	13. 30	19. 52	·0956					
16. 39	14. 55		***					
	***	23. 59	0952					
17. 21	14. 50							
17. 45	12. 0							
17. 54	12. 50							
18. 12	9. 50							
18. 25	11. 20							
18. 41	10. 0							
18. 49	11. 50							
19. 14	12. 0							
19. 31	10. 20							
20. 0	13. 30							
20. 18	11. 30							
20. 36	13. 40							
21. 11	13. 0							
21. 42	15. 5							
22. 40	17. 20							
23. 28	23. 0							
23. 59	23. 30							
June 25		June 25		June 25		June 25		
0. 0	21. 23. 30	0. 0	·0952	0. 0	·02340	1. 0	62·8	63·0
0. 27	24. 40	0. 53	·0961	1. 48	·02180	3. 0	64·0	65·0
0. 48	24. 0	1. 10	·0966	2. 42	·02157	9. 0	66·4	67·0
1. 18	27. 30	1. 22	·0959	10. 26:	·01564	21. 0	61·0	62·0
2. 5	23. 55	1. 50	·0966	22. 4	·02053			
	***							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

June 22. The Photographic Trace for the Horizontal Force Magnet was too faint for use.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 25		June 25		June 25				
h m	° ′ ″	h m		h m		h m	°	°
5. 30	21. 17. 50	1. 57	·0962	23. 59	·02047			
6. 57	14. 10	2. 13	·0967					
8. 30	13. 0	2. 27	·0965					
9. 29	15. 15		***					
	***	3. 53	·0967					
10. 57	10. 30		***					
11. 19	14. 0	5. 32	·0980					
11. 41	12. 0	5. 53	·0969					
	***	6. 45	·0982					
14. 14	13. 30	7. 7	·0972					
14. 31	15. 20	7. 32	·0977					
15. 10	12. 20	7. 56	·0970					
15. 16	13. 0		***					
	***	10. 45	·0967					
17. 13	11. 0	11. 15	·0974					
18. 7	13. 30	11. 26	·0968					
18. 32	7. 5		***					
	***	12. 52	·0960					
19. 44	8. 0	13. 40	·0964					
20. 7	13. 20	14. 7	·0956					
20. 49	9. 0	14. 40	·0963					
22. 44	16. 30		***					
23. 59	19. 0	18. 10	·0972					
			***					
		19. 53	·0950					
			***					
		21. 46	·0957					
			***					
		23. 59	·0947					
June 26		June 26		June 26		June 26		
0. 0	21. 19. 0	0. 0	·0947	0. 0	·02047	1. 0	64 ·0	64 ·4
0. 11	18. 25		***	9. 51 :	·01274	3. 0	66 ·3	67 ·0
0. 50	20. 50	6. 52	·0965	19. 13	·01930	9. 0	67 ·0	68 ·0
2. 49	20. 30	9. 7	·0961	22. 21	·02052	21. 0	60 ·8	61 ·3
3. 42	18. 10	9. 43	·0966	23. 59	·02071			
5. 44	16. 0		***					
7. 12	13. 0	15. 8	·0968					
9. 39	13. 20		***					
12. 11	15. 10	16. 43	·0975					
12. 29	14. 10		***					
13. 5	16. 15	19. 4	·0970					
	(†)	19. 22	·0960					
16. 19	9. 30	19. 40	·0966					
16. 45	9. 0		***					
17. 13	7. 15	20. 6	·0960					
17. 28	7. 50	20. 33	·0954					
17. 36	7. 0	20. 47	·0942					
17. 44	7. 50	21. 6	·0948					
17. 59	5. 45		***					
18. 37	6. 0	22. 6	·0940					
18. 43	4. 20	23. 18	·0957					
18. 54	5. 30	23. 59	·0969					
19. 8	2. 0							
19. 14	21. 3. 45							
19. 29	20. 59. 20							
19. 44	21. 4. 15							
19. 57	6. 50							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 26								
h m	° ′ ″	h m		h m		h m	°	°
20. 11	21. 5. 20							
20. 21	7. 0							
20. 30	5. 45							
20. 41	5. 20							
21. 11	11. 50							
21. 30	11. 0							
22. 4	15. 45							
22. 21	15. 15							
23. 14	18. 10							
	(†)							
June 27		June 27		June 27		June 27		
	(†)	0. 0	·0969	0. 0	·02071	0. 0	61 ·7	62 ·3
1. 0	21. 21. 59*	0. 56	·0967	5. 19	·02017	1. 0	62 ·0	62 ·7
2. 40	27. 30	1. 15	·0960	10. 14	·01900	3. 0	62 ·8	63 ·5
3. 39	22. 0	1. 34	·0963	20. 15	·02169	6. 0	63 ·3	63 ·5
5. 11	18. 5	1. 43	·0959	23. 59	·02070	9. 0	63 ·0	64 ·0
7. 12	15. 0	1. 56	·0973			12. 0	62 ·6	63 ·5
7. 46	15. 40	2. 17	·0958			18. 0	59 ·8	60 ·5
8. 42	14. 55	3. 17	·0984			21. 0	63 ·0	62 ·0
11. 25	15. 40	3. 58	·0976					
	***	5. 45	·0989					
12. 11	14. 30	6. 32	·0981					
	***	6. 53	·0987					
16. 24	13. 40	8. 11	·0982					
16. 47	12. 20	11. 50	·0977					
18. 43 :	9. 50	13. 15	·0983					
19. 59	11. 0	17. 26	·0980					
20. 40	10. 50	19. 43	·0950					
23. 59	19. 10	21. 56	·0942					
		23. 18	·0957					
		23. 59	·0961					
June 28		June 28		June 28		June 28		
0. 0	21. 19. 10	0. 0	·0961	0. 0	·02070	0. 0	64 ·3	64 ·5
0. 59	21. 50		***	0. 57	·02021	1. 0	65 ·0	65 ·3
1. 39	20. 30	1. 20	·0954	3. 14	·01780	3. 0	66 ·5	67 ·2
	***		***	6. 20	·01572	9. 0	64 ·5	65 ·0
4. 55	17. 55	1. 54	·0961	12. 3	·01666	21. 0	59 ·0	59 ·0
	***		***	14. 30	·01811			
7. 28	13. 30	3. 24	·0956	18. 34	·02148			
	***	4. 6	·0965	20. 50	·02253			
8. 45	15. 0	4. 37	·0961	23. 59	·02203			
9. 18	12. 10	5. 17	·0965					
9. 45	16. 10	5. 40	·0959					
10. 21	10. 20	6. 20	·0968					
11. 10	17. 50	6. 36	·0986					
11. 50	20. 30	6. 43	·0981					
12. 28	13. 20	6. 56	·1000					
12. 45	15. 50	7. 17	·0987					
13. 39	10. 30	7. 36	·0995					
13. 44	11. 30	7. 53	·0991					
	(†)	8. 13	·0998					
14. 39	11. 0	9. 10	·0981					
14. 56	9. 50	9. 42	·0984					
15. 20	10. 20		***					
16. 19	9. 30	10. 15	·0975					
16. 43	7. 45		***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
June 28		June 28						
h m	° ′ ″	h m		h m		h m	°	°
17. 26	21. 10. 10	10. 52	·0975					
17. 55	10. 0	11. 13	·0970					
18. 40	11. 0	11. 32	·0969					
19. 21	9. 50	12. 4	·0976					
20. 58	12. 20	12. 43	·0970					
23. 59	24. 0	12. 59	·0973					
		13. 15	·0968					
			***					
		14. 22	·0978					
			***					
		15. 0	·0965					
			***					
		15. 47	·0980					
		17. 46	·0976					
			***					
		21. 17	·0952					
			***					
		23. 59	·0954					
June 29		June 29		June 29		June 29		
0. 0	21. 24. 0	0. 0	·0954	0. 0	·02203	1. 0	61·0	61·4
1. 31	24. 50	0. 33	·0960	5. 21	·01410	3. 0	62·3	63·2
4. 21	18. 0		(†)	8. 55	·01243	9. 0	63·2	64·3
6. 30	14. 5	1. 0	·0956*	11. 0	·01207	21. 0	59·0	60·1
7. 29	15. 0	3. 15	·0962	12. 23	·01255			
8. 56	15. 0	4. 7	·0963	13. 29	·01182			
9. 4	16. 0	4. 10	·0956	14. 55	·01222			
9. 18	14. 0	4. 30	·0965	16. 28	·01360			
9. 27	14. 30		***	17. 47	·01382			
9. 40	13. 55	7. 46	·0967	18. 2	·01330			
9. 47	17. 30	8. 7	·0961	19. 0	·01449			
9. 54	16. 35		***	19. 30	·01460			
10. 14	17. 0	9. 22	·0959	19. 43	·01508			
10. 30	18. 0	9. 33	·1008	20. 3	·01492			
10. 51	16. 45	9. 47	·0982	22. 2	·01647			
10. 57	18. 0	9. 58	·0989	23. 2	·01644			
11. 18	6. 5	10. 10	·0985	23. 16	·01682			
11. 25	7. 20	10. 20	·0991	23. 31	·01657			
11. 29	6. 20	10. 36	·0986	23. 59	·01700			
11. 44	9. 30	10. 47	·0992					
11. 52	9. 55	10. 56	·0968					
11. 56	8. 0		***					
12. 0	8. 45	11. 23	·0956					
12. 6	7. 30	11. 30	·0970					
12. 11	8. 50	11. 40	·0961					
12. 21	7. 10	11. 46	·0965					
12. 51	13. 45	11. 51	·0956					
13. 10	21. 13. 55	12. 3	·0970					
13. 42	20. 53. 50		***					
13. 51	57. 30	12. 17	·0971					
13. 54	56. 30	12. 21	·0986					
13. 59	57. 50	12. 30	·0974					
14. 5	57. 10	12. 36	·0983					
14. 19	57. 50	13. 5	·0961					
	(†)	13. 10	·0965					
15. 45	57. 20	13. 15	·0954					
16. 11	20. 57. 10	13. 37	·0989					
16. 19	21. 0. 45	13. 45	·0976					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 29		June 29						
h m	° ′ ″	h m		h m		h m	°	°
16. 30	20. 57. 0	14. 17	·0960					
16. 45	59. 30	14. 26	·0973					
16. 58	20. 56. 50	14. 43	·0953					
17. 15	21. 0. 25	14. 52	·0959					
17. 22	20. 59. 45	15. 6	·0953					
17. 38	21. 4. 45		***					
17. 44	21. 2. 50	15. 47	·0974					
18. 6	20. 43. 15	16. 20	·0948					
18. 11	44. 40	16. 35	·0959					
18. 13	43. 55	16. 47	·0950					
18. 26	48. 40	17. 2	·0950					
18. 40	42. 20	17. 4	·0943					
18. 56	55. 10	17. 51	·0973					
19. 11	20. 52. 50	18. 8	·0966					
19. 30	21. 4. 10	18. 52	·0911					
19. 45	20. 50		***					
19. 54	14. 20	19. 13	·0914					
20. 0	16. 10	19. 36	·0942					
20. 4	15. 20	19. 42	·0935					
20. 13	19. 55	19. 50	·0952					
20. 20	17. 40	20. 6	·0911					
20. 31	20. 45	20. 13	·0918					
20. 35	20. 25	20. 17	·0910					
20. 42	21. 30	20. 30	·0921					
20. 49	15. 50	20. 36	·0928					
20. 52	16. 10	20. 47	·0923					
20. 55	14. 50	21. 3	·0906					
21. 0	16. 0	21. 10	·0920					
21. 7	15. 20		***					
21. 11	17. 40	21. 53	·0896					
21. 14	14. 45	22. 7	·0913					
21. 21	16. 45	22. 33	·0895					
21. 29	13. 50	22. 46	·0919					
21. 43	16. 20	23. 11	·0896					
21. 48	16. 10	23. 26	·0948					
22. 13	22. 0	23. 50	·0896					
22. 22	21. 20	23. 59	·0900					
	(†)							
June 30		June 30		June 30		June 30		
	(†)	0. 0	·0901	0. 0	·01705	1. 0	60·0	60·7
0. 28	21. 28. 10	0. 26	·0909	2. 30	·01790	3. 0	61·0	61·8
0. 35	29. 30	0. 43	·0899	8. 42	·01500	9. 0	61·8	62·2
1. 11	28. 40	1. 17	·1000	9. 22	·01440	21. 43	57·0	57·2
1. 39	34. 55	1. 26	·0992	10. 42	·01445			
1. 43	34. 10	1. 30	·0999	11. 47	·01373			
1. 49	35. 30	1. 37	·0982	12. 3	·01428			
1. 59	35. 25	1. 43	·0993	12. 26	·01300			
2. 23	30. 0	1. 45	·0987	12. 46	·01368			
2. 43	32. 5	1. 50	·0996	13. 13	·01264			
3. 0	28. 20	2. 20	·0962	13. 32	·01410			
	***	2. 43	·0989	14. 14	·01407			
3. 51	23. 40	3. 9	·0971	14. 22	·01450			
	***	3. 17	·0978	15. 8	·01348			
5. 19	23. 30	3. 20	·0984	15. 17	·01364			
5. 27	21. 30	3. 24	·0969	15. 30	·01322			
	***	3. 30	·0971	15. 49	·01380			
			***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June30		June30		June30				
h m	° ′ ″	h m		h m		h m	°	°
5. 44	21. 20. 30	3. 52	·0959	16. 11	·01362			
	***	4. 4	·0966	17. 37	·01700			
5. 56	21. 50	4. 13	·0961	18. 48	·01782			
6. 12	19. 30	4. 33	·0979	19. 27	·01763			
6. 37	20. 10		***	21. 44	·01851			
7. 10	17. 10	4. 56	·0968	22. 45	·01713			
7. 29	18. 5		***	23. 59	·01830			
7. 41	17. 30	5. 7	·0973					
7. 56	21. 30	5. 13	·0960					
8. 18	14. 20	5. 16	·0970					
8. 28	19. 0	5. 23	·0960					
8. 42	13. 5		***					
9. 15	20. 0	5. 47	·0962					
9. 31	13. 30		***					
9. 43	12. 30	6. 18	·0975					
9. 59	15. 50		***					
10. 5	15. 40	6. 58	·0964					
10. 21	17. 30	7. 15	·0973					
10. 43	12. 30	7. 33	·0966					
11. 21	21. 6. 25	7. 45	·0975					
11. 43	20. 57. 15	8. 6	·0960					
12. 8	21. 18. 0	8. 18	·0979					
12. 18	7. 0	8. 32	·0963					
12. 49	20. 45	9. 4	·0978					
13. 0	2. 30	9. 23	·0948					
13. 11	21. 4. 10	9. 52	·0961					
13. 30	20. 54. 0	10. 30	·0942					
14. 17	21. 15. 45	10. 36	·0979					
14. 39	10. 20	10. 42	·0968					
14. 57	19. 30	10. 46	·0972					
15. 9	18. 20		***					
15. 15	21. 50	11. 37	·0920					
15. 22	21. 0		***					
15. 29	17. 0	11. 54	·0938					
15. 34	18. 50	12. 10	·0944					
15. 42	13. 40	12. 36	·0972					
15. 45	18. 50	12. 50	·0899					
15. 55	11. 25	13. 9	·0946					
16. 30	2. 20	13. 40	·0970					
	***	13. 47	·0948					
16. 56	10. 0	13. 58	·0955					
17. 3	7. 0	14. 15	·0902					
17. 20	15. 50		***					
	***	14. 46	·0928					
17. 43	19. 50	14. 53	·0911					
17. 48	19. 0	15. 17	·0946					
18. 15	31. 20	15. 26	·0930					
18. 25	29. 0	15. 32	·0937					
18. 30	29. 50	15. 37	·0926					
18. 43	25. 30	15. 51	·0959					
19. 9	16. 0		***					
19. 27	18. 20	16. 18	·0942					
19. 36	17. 10		***					
19. 44	18. 30	17. 4	·0968					
20. 12	12. 30	17. 8	·0954					
20. 27	12. 0	17. 13	·0965					
20. 43	14. 0	18. 7	·0900					
20. 54	5. 30	18. 26	·0917					
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June30		June30						
h m	° ′ ″	h m		h m		h m	°	°
21. 51	21. 13. 20	18. 33	·0908					
	(†)	18. 51	·0924					
23. 46	27. 0		***					
23. 59	32. 45	19. 26	·0928					
			***					
		20. 45	·0918					
		20. 51	·0884					
		21. 7	·0920					
			***					
		21. 38	·0922					
		22. 6	·0950					
		22. 37	·0986					
		22. 45	·0983					
		22. 50	·0986					
		23. 4	·0989					
		23. 10	·0903					
		23. 17	·0898					
		23. 33	·0903					
		23. 40	·0932					
		23. 46	·0916					
		23. 52	·0918					
		23. 59	·0900					
July 1		July 1		July 1		July 1		
0. 0	21. 32. 45	0. 0	·0900	0. 0	·01830	8. 34	66·0	66·5
0. 15	32. 30	0. 20	·0930	0. 39	·01791	21. 0	64·8	64·5
0. 31	35. 30	0. 27	·0915	1. 39	·01786			
0. 42	33. 25	0. 33	·0926	1. 57	·01823			
1. 12	34. 20	0. 37	·0916	2. 35	·01780			
1. 45	30. 30	0. 40	·0928	2. 46	·01792			
1. 53	36. 0	0. 45	·0911	3. 57	·01588			
2. 3	31. 10	1. 7	·0949	4. 21	·01620			
2. 13	25. 50	1. 16	·0928	4. 46	·01718			
2. 19	27. 55	1. 32	·0960	7. 7	·01210			
2. 30	22. 45	1. 36	·0951	7. 13	·01260			
2. 42	26. 0	1. 46	·1007	7. 28	·01172			
2. 59	23. 30		***	7. 43	·01221			
3. 15	24. 15	1. 54	·1002	7. 56	·01193			
3. 52	23. 0	2. 10	·0952	8. 8	·01090			
4. 14	31. 20	2. 17	·0969	8. 20	·01052			
4. 45	20. 15	2. 30	·0933	8. 27	·01113			
4. 57	18. 55	2. 47	·0986	9. 37	·01070			
5. 11	23. 30	3. 0	·0958	10. 11	·01047			
5. 21	17. 20	3. 7	·0963	11. 13	·01090			
5. 26	17. 40	3. 13	·0946	12. 49	·01234			
5. 42	11. 20	3. 17	·0958	13. 40	·01225			
6. 9	20. 0	3. 24	·0938	14. 21	·01260			
6. 18	20. 0	3. 32	·0952	14. 56	·01228			
6. 33	21. 30		***	16. 7	·01325			
6. 57	20. 15	3. 51	·0940	21. 4	·01488			
7. 14	14. 0	4. 33	·1064	23. 2	·01428			
7. 21	13. 30	5. 0	·1006	23. 59	·01366			
7. 43	0. 10	5. 4	·1013					
7. 54	7. 10	5. 17	·0969					
7. 58	3. 45	5. 33	·0952					
8. 0	21. 9. 20	5. 45	·0973					
8. 12	20. 53. 30	5. 50	·0962					
8. 15	21. 2. 0	6. 4	·0954					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 1		July 1						
h m	° ′ ″	h m		h m		h m	°	°
8. 21	20. 58. 5	6. 6	·0972					
8. 42	21. 13. 50	6. 22	·0939					
	***	6. 33	·0944					
9. 19	20. 58. 50	6. 40	·0936					
9. 30	21. 4. 10	6. 52	·0946					
	***	7. 15	·0968					
9. 44	5. 30		(†)					
9. 53	10. 30	8. 34	·1083*					
9. 59	10. 0	9. 38	·0946					
10. 21	18. 10		***					
10. 31	11. 30	9. 57	·0944					
10. 45	19. 0	10. 3	·0958					
11. 3	15. 30	10. 11	·0940					
	***	10. 36	·0969					
11. 45	12. 50		***					
12. 17	13. 0	10. 47	·0970					
12. 29	16. 0	10. 53	·0949					
	***		***					
13. 6	15. 0	11. 40	·0947					
13. 20	12. 30	11. 51	·0931					
13. 41	14. 40	12. 4	·0935					
13. 57	24. 20	12. 17	·0928					
14. 44	14. 30	12. 42	·0941					
14. 56	13. 5	12. 50	·0941					
15. 2	13. 30	13. 4	·0935					
15. 16	11. 30	13. 15	·0941					
	***	13. 20	·0930					
17. 33	11. 30	13. 37	·0934					
17. 54	9. 30	13. 52	·0925					
	***	14. 13	·0940					
18. 36	8. 30	14. 45	·0929					
18. 48	15. 0		***					
19. 47	9. 0	16. 13	·0942					
	(†)		***					
21. 0	8. 38*	17. 17	·0937					
			***					
		18. 22	·0907					
		18. 45	·0922					
			(†)					
		21. 0	·0881*					
July 2		July 2		July 2		July 2		
	(†)		(†)	0. 0	·01366	1. 0	68·2	68·3
0. 58	21. 26. 0	1. 0	·0997*	0. 46	·01303	3. 0	69·8	70·0
1. 7	27. 0	3. 0	·0925*		(†)	9. 0	69·5	70·2
1. 24	26. 40	9. 0	·0938*	1. 0	·01252*	21. 0	63·2	64·3
2. 20	27. 45	15. 18	·0931	3. 0	·01334*			
3. 22	24. 45	16. 4	·0915	3. 20	·01310			
3. 41	22. 30	16. 17	·0926	4. 57	·01552			
4. 45	18. 45	16. 22	·0921	5. 41	·01567			
5. 0	20. 0	16. 37	·0929	6. 14	·01668			
	***	16. 46	·0922	8. 39	·01744			
6. 13	14. 20	17. 0	·0929	11. 28	·01730			
	***		***	13. 10	·01796			
6. 43	16. 45	18. 40	·0914	14. 15	·01877			
	***	18. 57	·0916	15. 7	·01640			
7. 53	13. 50	19. 35	·0896	15. 15	·01672			
8. 7	16. 0		***	16. 10	·01937			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 2		July 2		July 2				
h m	° ′ ″	h m		h m		h m	°	°
8. 30	21. 13. 45	20. 4	·0884	17. 26	·02111			
	***	20. 40	·0903	21. 7	·02330			
10. 16	15. 5		***	23. 59	·02466			
	***	21. 45	·0906					
10. 41	17. 55	22. 10	·0890					
	***		***					
11. 28	12. 45	23. 15	·0921					
	***	23. 20	·0914					
12. 33	11. 0	23. 59	·0930					
12. 44	16. 0							
12. 57	9. 30							
	***							
13. 14	8. 20							
13. 24	4. 20							
13. 37	9. 30							
13. 43	8. 20							
13. 49	23. 30							
14. 14	16. 55							
14. 22	21. 21. 0							
14. 53	20. 51. 55							
15. 14	21. 2. 40							
15. 25	1. 10							
15. 42	3. 30							
15. 56	0. 30							
16. 5	3. 15							
16. 15	0. 25							
16. 26	2. 0							
17. 16	2. 30							
17. 30	4. 5							
18. 12	2. 20							
18. 30	4. 30							
18. 53	2. 55							
19. 4	6. 30							
19. 29	6. 50							
19. 55	13. 0							
20. 21	10. 0							
20. 28	14. 10							
	***							
21. 28	13. 15							
22. 15	20. 45							
22. 50	21. 45							
23. 13	19. 50							
	(†)							
23. 54	19. 10							
23. 59	19. 45							
July 3		July 3		July 3		July 3		
0. 0	21. 19. 45	0. 0	·0930	0. 0	·02466	1. 0	65·0	66·5
0. 59	23. 0	0. 22	·0923	3. 15	·02290	3. 0	66·5	68·
2. 7	18. 50	0. 50	·0948	7. 29	·01876	9. 0	69·0	69·
2. 42	20. 0	1. 17	·0934	7. 43	·01990	21. 0	65·0	64·
3. 59	17. 0	1. 47	·0945	10. 11	·01875			
4. 35	13. 20		***	13. 43	·01957			
4. 55	15. 40	2. 22	·0949	19. 15	·02440			
5. 13	13. 50	2. 36	·0938	21. 51	·02565			
	***		***	23. 59	·02488			
6. 35	15. 0	2. 56	·0947					
	***	3. 4	·0936					
			***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 3		July 3						
h m	° ′ ″	h m		h m		h m		
8. 31	21. 14. 10	3. 40	·0935					
8. 54	11. 55		***					
9. 21	19. 0	5. 6	·0957					
9. 51	14. 10		***					
9. 59	15. 10	5. 50	·0950					
11. 6	15. 10	6. 40:	·0955					
11. 22	14. 30	7. 7	·0940					
14. 43	14. 0	7. 26	·0951					
14. 50	13. 0	8. 0:	·0931					
15. 24	14. 0	8. 20	·0939					
15. 38	12. 0	8. 34	·0933					
15. 57	11. 30		***					
16. 13	8. 50	12. 42	·0940					
	***		***					
18. 15	6. 20	14. 34	·0956					
18. 51	6. 30		***					
19. 14	9. 10	16. 10	·0951					
20. 13	8. 35		***					
21. 37	18. 5	19. 30	·0899					
22. 19	17. 30	22. 0	·0918					
22. 44	18. 10	22. 48	·0932					
23. 59	24. 0	23. 15	·0935					
		23. 22	·0942					
		23. 45	·0930					
			(†)					
July 4		July 4		July 4		July 4		
0. 0	21. 24. 0		(†)	0. 0	·02488	0. 0	66·0	67·0
0. 41	25. 55	1. 0	·0920*	5. 29	·02089	1. 0	67·0	68·0
0. 53	25. 10	1. 17	·0931	6. 52	·02013	3. 0	68·7	69·0
1. 42	27. 45		***	10. 29	·01968	6. 0	69·2	70·0
2. 57	24. 30	2. 40	·0950	10. 52	·01920	9. 0	67·8	69·0
3. 12	27. 0	3. 32	·0988	11. 45	·01927	12. 0	66·0	67·7
3. 20	25. 0	3. 40	·0978	11. 52	·01875	18. 0	57·5	61·0
3. 30	25. 55	3. 47	·0981	12. 30	·01823	21. 0	60·7	58·8
3. 51	23. 25	3. 54	·0976	13. 11	·02043			
4. 57	20. 30	4. 4	·0980	13. 15	·02010			
5. 21	16. 5	4. 17	·0974	13. 43	·02108			
5. 49	18. 35	4. 36	·0978	14. 28	·02228			
5. 53	16. 0	5. 13	·0964	14. 57	·02156			
6. 15	16. 30	5. 54	·1005	15. 16	·02190			
6. 36	12. 40	6. 33	·0981	15. 50	·02137			
6. 45	16. 10	6. 37	·0991	16. 31	·02290			
6. 56	11. 30	6. 45	·0962	16. 45	·02269			
7. 42	15. 10	6. 56	·0971	17. 14	·02492			
7. 51	17. 15	7. 7	·0962	19. 30	·02954			
	***		***	22. 41	·02712			
9. 52	17. 30	7. 30	·0955	23. 11	·02729			
10. 1	15. 30	7. 43	·0965	23. 59	·02662			
10. 40	20. 40	7. 50	·0958					
11. 0	12. 55		***					
11. 28	17. 25	8. 37	·0954					
11. 44	13. 30	9. 3	·0971					
11. 50	16. 10		***					
12. 7	4. 0	9. 48	·0937					
12. 17	2. 40	10. 5	·0955					
12. 30	21. 7. 50	10. 17	·0962					
12. 42	20. 55. 0	10. 26	·0975					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 4		July 4						
h m	° ′ ″	h m				h m		
12. 51	21. 4. 50	10. 45	·0959					
12. 54	20. 56. 10		***					
12. 59	21. 7. 30	11. 6	·0973					
13. 6	4. 15		***					
13. 17	12. 40	11. 44	·0943					
13. 22	1. 10	11. 50	·0975					
13. 26	5. 10	11. 56	·0949					
13. 48	21. 2. 10	12. 17	·0967					
14. 0	20. 54. 0	12. 34	·0934					
14. 30	21. 12. 10	12. 36	·0941					
14. 57	20. 56. 30	12. 40	·0926					
15. 39	21. 21. 30	12. 46	·0951					
15. 59	12. 20	12. 50	·0922					
16. 8	13. 5	13. 10	·0983					
16. 17	0. 0	13. 20	·0923					
16. 27	21. 2. 20	13. 26	·0935					
16. 41	20. 59. 0		***					
16. 45	21. 5. 50	13. 40	·0926					
16. 56	20. 52. 10		***					
17. 2	57. 5	13. 50	·0935					
17. 10	56. 0		***					
17. 14	57. 20	14. 13	·0922					
17. 18	56. 50	14. 27	·0926					
17. 29	57. 40	14. 48	·0956					
17. 37	20. 56. 45	14. 55	·0950					
17. 51	21. 16. 40	15. 10	·0959					
18. 0	10. 20	15. 19	·0975					
18. 9	12. 45	15. 30	·0970					
18. 14	2. 5	15. 35	·0956					
18. 22	7. 0	15. 42	·0963					
18. 30	2. 10	15. 47	·0931					
18. 40	6. 50	16. 0	·0913					
18. 51	4. 30	16. 30:	·0948					
19. 0	6. 30	16. 46	·0905					
19. 11	1. 5	16. 52	·0920					
19. 20	6. 55	16. 54	·0900					
19. 28	4. 20	17. 25	·0962					
19. 39	10. 0	17. 30	·0930					
19. 52	4. 40		***					
19. 56	6. 30	17. 35	·0914					
20. 0	3. 40		***					
20. 10	6. 45	18. 2	·0936					
20. 14	2. 40	18. 7	·0885					
20. 17	9. 50	18. 23	·0922					
20. 26	5. 55	18. 36	·0931					
20. 51	16. 0	18. 39	·0920					
21. 10	12. 0		***					
	***	19. 4	·0906					
22. 14	14. 0	19. 13	·0920					
22. 25	17. 20	19. 18	·0895					
22. 30	16. 30	19. 36	·0910					
22. 49	20. 30		***					
22. 57	19. 30	20. 7	·0873					
23. 5	23. 35		***					
23. 27	22. 0	20. 38	·0904					
23. 42	18. 40		***					
23. 49	21. 45	22. 12	·0890					
23. 59	21. 0		***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
		July 4						
h m	° ′ ″	h m					°	°
		22. 35	·0905					
			***					
		22. 48	·0877					
			***					
		23. 6	·0880					
		23. 16	·0893					
			***					
		23. 37	·0875					
			***					
		23. 53	·0910					
		23. 59	·0914					
July 5		July 5		July 5		July 5		
0. 0	21. 21. 0	0. 0	·0912	0. 0	·02662	0. 0	63·0	62·7
0. 12	25. 5	0. 5	·0874	1. 19	·02620	1. 0	64·3	64·3
0. 18	24. 10		(†)	1. 47	·02641	3. 0	67·7	68·2
0. 41	31. 45	1. 0	·0902*	2. 20	·02844	9. 14	71·0	71·3
0. 50	24. 0	3. 0	·0939*	3. 54	·02187	21. 0	64·0	65·0
0. 56	25. 30	3. 5	·0952	4. 40	·02057			
1. 0	24. 30	3. 12	·0959	5. 30	·01820			
1. 7	26. 50	3. 30	·0951	6. 7	·01902			
1. 15	25. 30	3. 42	·0970	8. 43	·02041			
	(†)	3. 48	·0955	8. 50	·02100			
2. 30	23. 20	4. 0	·0968	9. 10	·01960			
2. 36	22. 10	4. 6	·0956	10. 19	·02041			
2. 53	32. 40		(†)	14. 16:	·02147			
3. 4	29. 30	4. 45	·0958	20. 11	·02663			
3. 12	30. 10	5. 13	·0924	23. 59	·02787			
3. 28	26. 20	5. 20	·0932					
3. 54	30. 50	5. 41	·0898					
4. 36	18. 50	5. 50	·0912					
	***	6. 8	·0906					
4. 55	21. 35	6. 18	·0914					
5. 12	18. 30	6. 23	·0909					
5. 19	19. 20	6. 36	·0917					
5. 41	14. 15	6. 42	·0912					
6. 9	12. 50		***					
6. 30	15. 10	7. 15	·0921					
6. 46	14. 15		***					
7. 27	17. 10	7. 42	·0914					
7. 40	16. 50	7. 48	·0905					
7. 45	15. 0	7. 53	·0908					
8. 40	21. 14. 30	8. 12	·0913					
8. 57	20. 53. 10	8. 24	·0907					
9. 10	21. 22. 30	8. 45	·0914					
9. 15	14. 20	8. 48	·0903					
9. 30	26. 50	9. 7	·0936					
9. 46	16. 30	9. 17	·0957					
9. 57	18. 30	9. 38	·0899					
10. 15	12. 15	9. 46	·0919					
	***	10. 0	·0904					
11. 42	13. 10	10. 15	·0916					
12. 9	15. 20	10. 19	·0913					
	***	10. 25	·0924					
13. 10	10. 45	10. 31	·0916					
	***		***					
13. 51	19. 0	10. 53	·0926					
14. 16	14. 30		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
July 5		July 5						
h m	° ′ ″	h m					°	°
14. 44	21. 13. 10	11. 45	·0919					
14. 54	14. 35	11. 50	·0925					
15. 0	12. 0	11. 56	·0920					
	***	12. 9	·0926					
15. 25	11. 30	12. 15	·0919					
15. 28	14. 0	12. 30	·0932					
	***	12. 42	·0924					
15. 45	7. 30	12. 47	·0930					
15. 51	11. 30		***					
15. 55	8. 10	13. 48	·0918					
15. 59	10. 0		***					
16. 7	8. 30	16. 9	·0938					
16. 13	11. 0		***					
16. 17	7. 50	17. 17	·0920					
16. 22	10. 10		***					
16. 26	7. 20	18. 25	·0924					
	***		***					
17. 39	11. 0	21. 58	·0906					
	***		***					
19. 20	6. 55	23. 59	·0911					
	***							
21. 37	12. 30							
23. 59	20. 10							
July 6		July 6		July 6		July 6		
0. 0	21. 20. 10	0. 0	·0911	0. 0	·02787	1. 0	[illegible]	[illegible]
1. 29	28. 30	0. 40	·0916	3. 26	·02766	3. 0	66·3	[illegible]
	***	1. 29	·0925	9. 51:	·02487	9. 0	[illegible]	67·2
2. 41	28. 15	1. 40	·0917	18. 11	·03192	21. 0	58·2	58·8
3. 17	24. 20	2. 6	·0934	21. 27	·02831			
3. 21	26. 0	2. 18	·0915	23. 59	·02684			
3. 42	21. 30	2. 30	·0944					
4. 47	21. 55	2. 38	·0934					
5. 36	20. 0	2. 50	·0954					
8. 20	17. 0	2. 58	·0931					
15. 47	18. 15		***					
	***	3. 17	·0940					
17. 17	15. 40	3. 26	·0975					
	***	3. 37	·0944					
19. 13	15. 50	3. 42	·0968					
19. 31	14. 30	3. 45	·0948					
	***	3. 48	·0959					
20. 55	15. 30	3. 55	·0924					
23. 59	25. 55	4. 7	·0935					
		4. 28	·0927					
		5. 56	·0940					
		8. 40	·0932					
			***					
		16. 18	·0955					
		20. 0	·0945					
		22. 15	·0923					
			***					
		23. 59	·0931					
July 7		July 7		July 7		July 7		
0. 0	21. 25. 55	0. 0	·0931	0. 0	·02684	1. 0	[illegible]	[illegible]
1. 0	21. 30	0. 57	·0938	2. 12	·02588	3. 0	63·0	64·0
1. 44	20. 50	1. 36:	·0935	11. 15:	·01842	9. 0	66·0	67·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 7		July 7		July 7		July 7		
h m	° ′ ″	h m		h m		h m	°	°
2. 12	21. 22. 30	2. 15	·0949	19. 54	·02530	21. 25	58 ·2	59 ·3
3. 7	21. 45		***	21. 51	·02628			
6. 52	13. 50	2. 50	·0947	23. 59	·02479			
7. 25	14. 30	3. 47	·0955					
7. 51	12. 50		***					
13. 15	15. 0	4. 40	·0954					
13. 35	16. 0	5. 17:	·0947					
14. 12	14. 55	6. 4	·0956					
14. 42	16. 0	6. 32	·0947					
	***	6. 53	·0952					
16. 9	12. 0		***					
16. 29	12. 30	7. 50	·0944					
16. 44	13. 45		***					
17. 4	13. 10	11. 15	·0941					
17. 15	14. 10		***					
17. 30	13. 0	15. 11	·0954					
17. 37	14. 0		***					
17. 54	11. 30	16. 47	·0947					
17. 58	12. 40	18. 36:	·0952					
18. 15	11. 0	22. 12	·0927					
20. 40	8. 30	22. 55	·0929					
21. 43	10. 30	23. 12	·0935					
22. 10	14. 55	23. 35	·0931					
22. 21	15. 10	23. 46	·0934					
	(†)	23. 59	·0930					
July 8		July 8		July 8		July 8		
	(†)	0. 0	·0930	0. 0	·02479	9. 29	64 ·2	65 ·5
2. 27	21. 25. 30	0. 59:	·0941	2. 17:	·02444	21. 0	59 ·8	60 ·4
5. 14	16. 30	1. 40	·0930	8. 42:	·01680			
7. 10	15. 0	2. 21	·0950	15. 39	·01930			
7. 47	13. 40	2. 46	·0954	23. 59	·02291			
13. 39	13. 30	3. 12	·0946					
14. 37	14. 10	4. 2	·0955					
14. 57	13. 30	4. 15	·0948					
15. 26	15. 0		***					
16. 17	12. 20	4. 53	·0956					
16. 38	12. 30	5. 8	·0951					
17. 52	7. 35	5. 47	·0950					
18. 30	7. 50	6. 21	·0957					
18. 52	6. 55	8. 25	·0945					
19. 14	7. 25	16. 56	·0949					
	(†)	21. 53	·0931					
21. 0	9. 7*	22. 11	·0934					
		22. 56	·0924					
		23. 35	·0930					
		23. 59	·0928					
July 9		July 9		July 9		July 9		
	(†)	0. 0	·0928	0. 0	·02291	1. 0	61 ·7	62 ·6
1. 2	21. 22. 20		***	2. 27	·02216	3. 0	64 ·3	65 ·0
2. 40	20. 0	1. 45	·0945	7. 21	·01623	9. 0	67 ·3	68 ·0
3. 30	17. 45		***	9. 2	·01490	21. 0	59 ·8	60 ·7
3. 46	18. 0	2. 58	·0947	13. 46	·01600			
4. 21	16. 10		***	19. 30	·02008			
4. 29	17. 30	4. 17	·0956	22. 45	·02200			
4. 43	14. 0	4. 25	·0964	23. 59	·02189			
5. 40	12. 35		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 9		July 9						
h m	° ′ ″	h m		h m		h m	°	°
6. 1	21. 13. 50	4. 56	·0959					
6. 21	12. 40	5. 10	·0964					
7. 10	13. 30	5. 45	·0956					
7. 40	9. 45	6. 3	·0964					
8. 14	14. 0		***					
8. 24	14. 30	6. 47	·0948					
11. 55	12. 20		***					
12. 59	15. 40	8. 3	·0962					
13. 49	11. 30		***					
15. 0	9. 20	9. 2	·0948					
15. 58	13. 0		***					
17. 0	11. 0	11. 24	·0951					
20. 14	11. 45	12. 5	·0944					
20. 26	10. 30	13. 40	·0948					
21. 59	13. 40	14. 52	·0944					
22. 43	17. 25	15. 35	·0950					
23. 59	21. 50	16. 20	·0949					
		17. 12	·0954					
		20. 15	·0936					
			***					
		22. 47	·0929					
		23. 59	·0936					
July 10		July 10		July 10		July 10		
0. 0	21. 21. 50	0. 0	·0936	0. 0	·02189	1. 0	60 ·2	61 ·7
1. 39	22. 30	1. 47	·0950	2. 26	·02272	3. 0	61 ·3	62 ·0
1. 49	22. 0	2. 9	·0961	6. 27	·02165	9. 0	62 ·0	62 ·9
1. 58	23. 20		***	12. 7	·02137	21. 0	60 ·0	61 ·2
2. 12	22. 0	3. 12	·0952	13. 45	·02146			
4. 12	18. 25	3. 33	·0964	15. 46	·02257			
5. 37	18. 50		***	21. 30	·02440			
6. 52	17. 20	4. 15	·0960	23. 59	·02410			
7. 12	18. 0		***					
8. 12	17. 20	5. 0	·0970					
8. 49	14. 40		***					
	***	5. 40	·0971					
10. 10	14. 20		***					
10. 55	11. 0	6. 23	·0963					
11. 51	13. 10	6. 47	·0966					
12. 10	10. 50	7. 30	·0988					
12. 24	10. 0	7. 46	·0989					
13. 12	15. 20	8. 40	·0969					
13. 55	8. 30		***					
14. 38	13. 0	11. 26	·0972					
15. 14	13. 40		***					
15. 22	12. 50	12. 42	·0962					
15. 40	13. 45	13. 18	·0989					
17. 38	12. 30		***					
17. 54	13. 20	14. 46	·0967					
18. 10	12. 0		***					
18. 14	13. 0	17. 47:	·0972					
18. 54	13. 20	22. 12	·0943					
19. 12	12. 40	23. 59	·0945					
19. 40	12. 40							
20. 30	11. 10							
21. 52	13. 20							
23. 59	20. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 11		July 11		July 11		July 11		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 20. 0	0. 0	·0945	0. 0	·02410	0. 0	62·2	63·7
1. 56	23. 30	2. 8	·0949	2. 27	·02248	1. 0	63·0	64·0
2. 12	22. 30		***	5. 40	·01820	3. 0	65·3	67·0
2. 40	24. 10	3. 30	·0965	9. 10	·01507	6. 0	68·0	69·0
5. 12	17. 0		***	10. 0	·01565	9. 0	68·5	69·5
6. 53	13. 45	3. 47	·0952	11. 31	·01571	12. 0	67·4	68·2
6. 55	15. 40	4. 8	·0970	14. 28	·01677	18. 0	62·0	63·8
9. 7	15. 0	4. 17	·0962	15. 24	·01723	21. 0	61·6	62·7
9. 40	12. 20	4. 19	·0969	19. 25	·02024			
10. 21	16. 20	5. 10	·0964	19. 42	·02095			
11. 0	11. 40	5. 29	·0942	19. 53	·02077			
11. 30	4. 30	5. 46	·0954	20. 50	·02118			
12. 10	10. 0	5. 53	·0946	22. 15	·02282			
12. 47	9. 0	6. 10	·0965	23. 59	·02341			
14. 13	10. 20	6. 18	·0951					
14. 25	9. 40	6. 39	·0960					
14. 30	10. 30		***					
14. 48	8. 0	7. 17	·0951					
14. 58	10. 50	7. 50	·0951					
15. 27	10. 30	8. 7	·0957					
15. 43	7. 0		***					
15. 54	9. 45	8. 30	·0953					
16. 0	9. 10		***					
16. 14	18. 10	10. 24	·0952					
16. 40	11. 0	10. 46	·0962					
16. 43	12. 0	11. 6	·0959					
16. 53	9. 30	11. 7	·1003					
17. 0	11. 40	11. 18	·0973					
17. 13	9. 50	11. 23	·0979					
17. 21	11. 30	11. 30	·0954					
17. 37	9. 0	11. 37	·0969					
17. 43	12. 0		***					
17. 48	7. 20	13. 35	·0978					
17. 54	11. 30	13. 45	·0986					
18. 14	4. 10	13. 48	·0975					
18. 30	12. 30	13. 53	·0989					
18. 40	7. 20		***					
18. 45	12. 45	14. 13	·0976					
19. 7	3. 10	14. 17	·0988					
19. 45	42. 15	14. 21	·0976					
20. 7	24. 40		***					
20. 12	27. 15	14. 45	·0988					
20. 15	25. 30		***					
20. 19	26. 30	15. 12	·0980					
20. 25	24. 40		***					
20. 40	23. 40	16. 8	·0952					
20. 58	16. 30		***					
21. 3	17. 35	17. 20	·0968					
21. 30	13. 30		***					
21. 47	14. 30	17. 57	·0954					
21. 55	13. 50	18. 12	·0935					
23. 25	25. 30	18. 26	·0972					
23. 40	25. 15	18. 37	·0952					
23. 55	27. 10	18. 42	·0966					
23. 59	26. 45	18. 53	·0910					
		19. 12	·0892					
		19. 33	·0826					
		19. 47	·0940					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		July 11						
h m	° ′ ″	h m		h m		h m	°	°
		20. 22	·0966					
		20. 45	·0952					
			***					
		23. 7	·0934					
		23. 21	·0941					
		23. 43	·0921					
		23. 59	·0926					
July 12		July 12		July 12		July 12		
0. 0	21. 26. 45	0. 0	·0926	0. 0	·02341	0. 0	63·0	63·8
0. 25	23. 10	0. 12	·0901	1. 41	·02386	1. 0	64·0	65·0
0. 52	26. 0	2. 7	·0954	2. 27	·02369	3. 0	66·5	67·7
1. 5	25. 0	2. 30	·0942	3. 41	·02280	9. 0	69·5	70·5
1. 40	27. 0	2. 51	·0964	7. 11	·01751	21. 0	61·4	62·2
1. 51	25. 10	3. 33	·0935	9. 30	·01577			
2. 51	23. 50	3. 48	·0952	12. 12	·01672			
3. 33	16. 30	3. 51	·0945	17. 17	·01980			
3. 50	17. 5	4. 0	·0958	22. 16	·02405			
4. 12	16. 15	4. 12	·0974	23. 59	·02494			
4. 50	17. 50	4. 30	·0961					
6. 22	15. 45	5. 2	·0948					
8. 7	15. 50		***					
8. 13	14. 45	6. 0	·0949					
9. 40	15. 20	6. 22	·0958					
10. 51	14. 20		***					
11. 7	13. 20	7. 4	·0957					
11. 17	13. 30	7. 53	·0944					
11. 28	12. 30		***					
11. 53	13. 5	9. 20	·0939					
12. 6	10. 50		***					
12. 29	10. 20	11. 15	·0940					
13. 24	16. 30	11. 40	·0948					
14. 0	13. 30	11. 51	·0942					
14. 11	14. 20	12. 12	·0939					
14. 14	13. 55	12. 20	·0946					
15. 17	15. 40	12. 27	·0938					
16. 15	15. 30	12. 35	·0942					
16. 45	18. 40	12. 46	·0934					
17. 43	14. 30	13. 3	·0942					
18. 6	15. 0	13. 12	·0934					
18. 43	13. 15	13. 42	·0950					
	***	14. 12	·0950					
20. 43	12. 30	14. 22	·0944					
21. 1	14. 0	14. 30	·0948					
21. 27	13. 20		***					
23. 59	21. 0	15. 40	·0955					
			***					
		16. 45	·0946					
		17. 22	·0953					
		19. 35	·0950					
		22. 46	·0923					
			***					
		23. 59	·0933					
July 13		July 13		July 13		July 13		
0. 0	21. 21. 0	0. 0	·0933	0. 0	·02494	1. 0	63·0	64·0
0. 54	22. 45		***	2. 12	·02492	3. 0	65·5	67·0
3. 13	19. 50	1. 46	·0944	4. 42	·02180	9. 0	69·7	70·5

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 13		July 13		July 13		July 13		
h m	° ′ ″	h m		h m		h m	°	°
3. 26	21. 20. 10	3. 2	·0958	6. 46	·01807	21. 0	62 ·7	63 ·8
4. 10	16. 10	3. 20	·0980	8. 44	·01610			
4. 24	15. 30	4. 5	·0954	12. 26	·01757			
4. 55	15. 45		***	19. 0	·02300			
5. 51	12. 25	4. 30	·0950	22. 38	·02512			
7. 13	13. 45	4. 42	·0961	23. 59	·02551			
10. 4	13. 30		***					
12. 25	15. 50	5. 6	·0964					
12. 46	14. 5	5. 43	·0945					
13. 25	14. 30		***					
13. 51	15. 30	6. 10	·0949					
15. 10	14. 30	6. 29	·0939					
15. 16	13. 30		***					
	***	8. 15	·0944					
17. 30	12. 20	9. 13	·0938					
17. 51	13. 20		***					
18. 7	12. 20	12. 22	·0948					
18. 40	12. 50		***					
18. 46	11. 30	15. 30	·0950					
19. 21	14. 0	17. 6	·0957					
19. 47	12. 45	18. 25	·0957					
20. 14	13. 20	22. 33	·0938					
23. 29	25. 20		***					
23. 59	25. 35	23. 59	·0945					
July 14		July 14		July 14		July 14		
0. 0	21. 25. 35	0. 0	·0945	0. 0	·02551	1. 0	64 ·0	65 ·0
0. 52	27. 0	0. 37	·0954	1. 54	·02566	3. 0	66 ·5	67 ·6
3. 55	17. 45		***	10. 40:	·01950	9. 0	69 ·3	70 ·2
5. 25	16. 0	1. 16	·0953	19. 31	·02432	22. 40	67 ·4	67 ·5
16. 10	14. 0	1. 40	·0959	23. 59	·02480			
19. 15:	9. 55		***					
21. 43	15. 0	9. 36	·0952					
21. 51	14. 20	17. 43	·0958					
23. 14	20. 0	20. 27	·0952					
23. 59	20. 10	21. 33	·0943					
		23. 59	·0936					
July 15		July 15		July 15		July 15		
0. 0	21. 20. 10	0. 0	·0936	0. 0	·02480	9. 5	70 ·0	70 ·5
1. 29	20. 50	3. 36	·0946	2. 48	·02424	21. 0	64 ·6	65 ·7
4. 55	17. 0	3. 48	·0951	5. 40	·02233			
11. 22	15. 55	5. 27	·0946	10. 12	·02040			
12. 35	14. 20	6. 24	·0952	13. 47	·02090			
13. 44	15. 50	10. 33	·0951	21. 12	·02470			
14. 45	14. 55	11. 0	·0955		(†)			
15. 14	15. 10	13. 30	·0952					
15. 55	14. 0	15. 7	·0954					
19. 55	13. 30	18. 18	·0953					
20. 28	14. 20	20. 47	·0941					
21. 11	14. 10		(†)					
	(†)	21. 0	·0941*					
July 16		July 16		July 16		July 16		
	(†)	1. 0	·0952*		(†)	1. 0	66 ·0	67 ·0
0. 40	21. 20. 40	3. 0	·0967*	1. 0	·02493*	3. 0	66 ·3	67 ·2
1. 54	20. 50	9. 0	·0975*	3. 0	·02515*	9. 0	65 ·8	66 ·7
2. 28	19. 40	21. 0	·0947*	5. 54	·02220	21. 0	63 ·3	64 ·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 16				July 16				
h m	° ′ ″	h m		h m		h m	°	°
3. 46	21. 20. 10			14. 53	·02297			
5. 30	18. 0			20. 45	{·02210 ·02145			
6. 6	16. 40							
6. 14	17. 0			22. 21	·02184			
6. 36	15. 0			23. 59	·02149			
7. 0	17. 5							
7. 12	16. 30							
9. 17	17. 40							
9. 35	16. 45							
	***							
14. 56	16. 45							
15. 50	16. 0							
16. 17	13. 40							
16. 40	14. 10							
17. 11	13. 25							
17. 43	14. 50							
18. 40	13. 20							
19. 43	13. 20							
19. 59	14. 5							
20. 17	13. 20							
20. 39	15. 40							
20. 54	14. 15							
21. 26	16. 20							
23. 40	20. 30							
23. 59	20. 25							
July 17		July 17		July 17		July 17		
0. 0	21. 20. 25	1. 0	·0939*	0. 0	·02149	1. 0	67 ·0	68 ·0
0. 30	19. 50	3. 0	·0952*	2. 40	·01930	3. 0	68 ·7	69 ·3
0. 51	19. 0	9. 0	·0953*	4. 45	·01660	9. 0	69 ·8	70 ·0
1. 12	20. 0	21. 0	·0930*	6. 29	·01548	21. 0	63 ·3	63 ·7
1. 56	17. 30			7. 41	{·01556 ·01744			
3. 59	16. 50							
6. 26	13. 0			14. 34	·01790			
8. 7	15. 0			16. 45	·01948			
8. 28	14. 20			19. 2	·02209			
8. 53	15. 0			21. 27	·02360			
10. 45	13. 50			22. 57	·02362			
11. 15	10. 20			23. 59	·02312			
11. 37	11. 30							
11. 55	10. 5							
12. 12	10. 40							
12. 25	9. 35							
12. 52	12. 20							
13. 40	8. 20							
14. 4	9. 20							
14. 14	8. 40							
14. 28	9. 0							
15. 10	8. 45							
16. 13	13. 30							
16. 55	9. 45							
17. 43	6. 50							
18. 25	8. 0							
18. 44	7. 40							
20. 42	11. 20							
23. 59	21. 30							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

July 16 and 17. The Photographic Traces for the Horizontal Force Magnet were too faint for use.

Greenwich Mean Solar Time.	Western Declination.
July 18	
h m	° ′ ″
0. 0	21. 21. 30
1. 17	22. 20
3. 5	18. 20
3. 39	18. 30
4. 48	16. 40
4. 56	18. 5
5. 18	16. 15
6. 24	14. 40
7. 26	16. 10
8. 43	14. 45
9. 42	12. 20
9. 54	13. 35
10. 12	11. 40
10. 58	16. 15
11. 37	16. 0
11. 59	13. 20
12. 21	16. 30
12. 45	15. 50
12. 57	14. 10
13. 11	15. 10
13. 22	12. 50
13. 32	13. 30
14. 8	6. 20
14. 27	11. 0
14. 51	9. 50
15. 11	11. 20
15. 26	21. 20
15. 50	13. 0
16. 27	8. 55
17. 5	10. 0
17. 31	7. 0
18. 27	12. 5
18. 30	11. 45
18. 42	12. 50
19. 0	11. 10
19. 13	12. 20
19. 43	11. 0
19. 49	12. 15
19. 55	10. 20
19. 58	12. 10
20. 17	7. 50
20. 26	9. 40
20. 29	9. 0
20. 40	11. 20
20. 49	8. 20
20. 58	12. 30
21. 10	12. 0
21. 19	13. 40
21. 30	13. 30
21. 43	15. 0
22. 17	14. 55
22. 30	20. 35
22. 49	17. 50
23. 5	21. 50
23. 59	22. 50
July 19	
0. 0	21. 22. 50
	***

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
July 18	
h m	
	(†)
0. 55	·0940
1. 32	·0939
	***
2. 34	·0952
2. 53	·0945
3. 17	·0947
3. 45	·0943
	***
4. 42	·0950
4. 51	·0972
5. 8	·0951
	***
5. 27	·0953
5. 36	·0959
5. 46	·0959
6. 0	·0965
6. 13	·0958
6. 40	·0961
6. 48	·0957
7. 0	·0960
7. 26	·0949
8. 20	·0971
8. 52	·0957
9. 17	·0965
	***
9. 54	·0956
10. 20	·0966
	***
12. 0	·0968
12. 20	·0977
12. 51	·0966
13. 13	·0973
	***
14. 3	·0967
14. 40	·0963
15. 17	·0960
15. 46	·0974
	***
17. 7	·0976
18. 24	·0957
	***
19. 43	·0958
	***
21. 30	·0935
21. 40	·0939
21. 53	·0927
22. 4	·0934
22. 17	·0909
22. 56	·0939
23. 5	·0933
	***
23. 59	·0943
July 19	
0. 0	·0943
	***

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
July 18	
h m	
0. 0	·02312
1. 57	·02294
8. 12	·01590
12. 40	·01710
15. 41	·01852
16. 11	·01837
19. 34	·02070
23. 59	·02218
July 19	
0. 0	·02218
1. 55	·02250

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
July 18		
h m		
0. 0	64·5	[illegible]
1. 0	66·[illegible]	66·[illegible]
3. 0	68·0	68·0
6. 0	68·5	68·3
9. 0	67·1	67·2
12. 0	65·8	66·7
18. 0	63·0	63·2
21. 0	63·0	63·7
July 19		
0. 0	63·0	63·6
1. 0	63·2	63·7

Greenwich Mean Solar Time.	Western Declination.
July 19	
h m	° ′ ″
1. 45	21. 26. 30
4. 13	20. 0
4. 21	22. 30
4. 30	20. 5
6. 15	15. 50
6. 51	15. 20
6. 56	16. 55
7. 7	14. 10
7. 15	13. 50
7. 23	14. 20
7. 34	15. 55
8. 39	15. 0
8. 53	16. 10
9. 13	14. 30
9. 45	16. 15
10. 24	14. 20
10. 59	17. 30
11. 14	14. 0
11. 22	15. 0
11. 47	2. 0
	(†)
12. 54	6. 30
13. 14	3. 40
13. 39	10. 45
14. 0	7. 30
14. 24	24. 30
14. 54	13. 20
14. 58	16. 50
15. 10	16. 15
15. 13	19. 0
15. 22	16. 55
15. 35	18. 40
16. 5	14. 20
16. 11	15. 50
16. 17	14. 20
16. 42	16. 20
17. 21	11. 20
	***
18. 14	9. 50
	***
18. 38	13. 0
18. 49	11. 30
19. 7	13. 25
19. 20	11. 50
20. 27	10. 30
	***
20. 57	14. 30
	***
21. 44	17. 15
	***
22. 12	16. 10
	***
22. 50	17. 50
23. 10	19. 30
23. 21	18. 50
23. 57	22. 0
23. 59	21. 45

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
July 19	
h m	
1. 45	·0962
1. 52	·0956
2. 3	·0960
2. 7	·0944
2. 17	·0952
2. 40	·0946
3. 16	·0958
3. 30	·0952
	***
4. 6	·0950
4. 17	·0942
4. 21	·0902
4. 32	·0976
4. 37	·0984
4. 46	·0972
	***
5. 10	·0962
5. 33	·0966
5. 47	·0963
6. 7	·0971
6. 20	·0969
6. 32	·0974
	***
6. 53	·0970
6. 58	·0976
7. 6	·0959
7. 17	·0972
	***
7. 46	·0965
8. 21	·0965
8. 40	·0977
9. 0	·0962
9. 16	·0971
9. 30	·0966
9. 40	·0971
10. 3	·0962
10. 10	·0967
10. 20	·0994
10. 40	·0972
10. 56	·0972
11. 7	·0967
11. 17	·0977
11. 33	·0958
11. 56	·0988
12. 6	·0980
12. 10	·1009
12. 17	·0999
12. 30	·1013
12. 40	·1027
12. 45	·1013
12. 47	·1018
12. 52	·1013
13. 3	·1019
13. 17	·0990
14. 3	·0959
14. 21	·0976
14. 33	·0968
	***
15. 10	·0958

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
July 19	
h m	
7. 42	·01863
9. 16	·018[illegible]
11. 30	·01888
11. 57	·01[illegible]2
13. 15	·01917
14. 14	·01960
14. 34	·01908
15. 42	·02047
17. 43	·02140
20. 9	·02383
21. 45	·02335 ·02190
23. 59	·02169

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
July 19		
h m		
3. 0	[illegible]	[illegible]
9. 10	[illegible]	[illegible]
21. 10	[illegible]	[illegible]

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		July 19						
h m	° ′ ″	h m		h m		h m	°	°
		15. 23	·0969					
		15. 37	·0956					
		16. 8	·0978 ***					
		17. 15	·0966 ***					
		18. 4	·0970 ***					
		19. 3	·0948 ***					
		20. 7	·0941 ***					
		20. 36	·0946 ***					
		21. 45	·0932 ***					
		22. 40	·0930 ***					
		23. 59	·0945					
July 20		July 20		July 20		July 20		
0. 0	21. 21. 45	0. 0	·0945 ***	0. 0	·02169	1. 0	63·7	64·0
0. 10	21. 20			2. 43	·02090	3. 0	65·7	65·8
0. 40	23. 55	2. 10	·0948 ***	3. 16	{·02004 ·01950	9. 0	65·4	66·0
1. 43	24. 0					21. 0	60·0	60·6
2. 17	22. 0	2. 40	·0961	7. 32	·01720			
2. 38	23. 0	2. 52	·0956	9. 43	·01697			
3. 21	20. 20	3. 46	·0975 ***	11. 20	·01740			
3. 55	20. 10			15. 25	·02011			
4. 30	17. 50	4. 47	·0955	18. 40	·02320			
5. 10	13. 10	5. 40	·0978	20. 20	{·02308 ·02100			
6. 16	15. 50	5. 47	·0969					
6. 49	15. 0	6. 18	·0982 ***	23. 59	·02007			
7. 58	16. 30							
8. 19	13. 30	7. 36	·0973					
9. 14	17. 50	7. 47	·0978					
9. 45	14. 0	8. 3	·0971 ***					
10. 8	16. 10							
10. 44	15. 0	8. 38	·0976					
11. 13	17. 0	8. 50	·0967					
11. 28	14. 15	9. 8	·0975					
11. 40	14. 30	9. 33	·0961					
12. 6	11. 10	9. 47	·0969					
12. 51	14. 20	10. 30	·0955					
13. 7	12. 0	11. 0	·0968					
13. 40	13. 20	11. 15	·0961					
13. 56	16. 40	11. 34	·0970 ***					
14. 13	14. 20							
14. 55	18. 0	12. 30	·0961					
15. 42	11. 0	12. 53	·0967 ***					
16. 37	15. 5							
17. 9	14. 0	13. 37	·0960 ***					
17. 15	15. 50 ***	14. 17	·0963 ***					
18. 3	18. 15							
18. 29	14. 10	14. 58	·0983					
18. 36	14. 30	15. 6	·0977					
19. 10	10. 20	15. 22	·0987 ***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 20		July 20						
h m	° ′ ″	h m		h m		h m	°	°
19. 58	21. 10. 30	16. 45	·0986 ***					
20. 40	15. 0							
20. 54	13. 50	17. 17	·0968 ***					
21. 14	13. 50							
21. 22	14. 45	19. 40	·0953					
21. 40	13. 45	20. 22	·0936 ***					
21. 58	15. 55							
22. 27	15. 55	23. 0	·0934					
22. 36	17. 0	23. 30	·0946					
22. 58	16. 15	23. 46	·0940					
23. 59	20. 30	23. 59	·0940					
July 21		July 21		July 21		July 21		
0. 0	21. 20. 30	0. 0	·0940	0. 0	·02007	1. 0	60·8	60·9
0. 20	22. 40	1. 6	·0948	3. 43	·02070	3. 0	62·0	62·0
2. 12	24. 20	1. 10	·0944	6. 27	·01928	9. 0	64·0	63·6
2. 19	23. 40	1. 21	·0948	10. 30	·01720	22. 42	59·5	60·6
2. 42	23. 40	1. 33	·0945	14. 45	·01807			
3. 39	21. 30	2. 47	·0968	20. 59	·02049			
3. 43	22. 20	3. 7	·0961	23. 59	·02017			
4. 11	19. 40	3. 15	·0965					
4. 29	20. 0	3. 27	·0960					
5. 15	18. 40	3. 46	·0972					
6. 29	14. 0	4. 8	·0953					
6. 54	14. 40	4. 32	·0967					
7. 9	13. 40	4. 45	·0961					
7. 44	12. 40	4. 50	·0966					
8. 22	15. 0	5. 6	·0957					
8. 45	13. 40	5. 23	·0963					
10. 6	14. 40	5. 46	·0952					
10. 21	12. 30	6. 7	·0961					
10. 31	13. 35	6. 15	·0959					
11. 0	11. 50	6. 45	·0982 ***					
11. 19	13. 20							
11. 37	12. 20	7. 17	·0983 ***					
11. 50	12. 30							
12. 11	14. 30	7. 40	·0971 ***					
12. 29	15. 45							
13. 25	12. 30 ***	8. 32	·0963 ***					
13. 58	13. 50	10. 17	·0974 ***					
14. 37	22. 20							
15. 10	18. 30	11. 33	·0966 ***					
15. 13	19. 20							
15. 30	18. 20	13. 8	·0971 ***					
16. 0	14. 55							
16. 27	15. 10	14. 17	·0962 ***					
16. 45	14. 10							
17. 6	15. 0	17. 7	·0979					
17. 22	14. 0	17. 46	·0968					
17. 37	12. 30 ***	18. 6	·0970 ***					
18. 0	14. 30	20. 6	·0960					
18. 18	13. 45	21. 25	·0937					
18. 47	14. 0	23. 0	·0929 ***					
19. 14	10. 45							
19. 57	8. 20	23. 59	·0938					
20. 11	11. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 21								
h m	° ′ ″	h m		h m		h m	°	°
20. 15	21. 10. 10							
20. 26	10. 25							
20. 33	9. 30							
20. 58	13. 30							
21. 30	13. 50							
21. 51	15. 45							
22. 8	15. 20							
22. 36	18. 25							
23. 25	21. 0							
23. 59	23. 30							
July 22		July 22		July 22		July 22		
0. 0	21. 23. 30	0. 0	·0938	0. 0	·02017	8. 33	64·0	64·4
0. 30	25. 15	0. 30	·0948	2. 55	·01870	21. 0	59·0	60·0
	***	0. 45	·0940	6. 43	·01504			
2. 10	23. 50	1. 7	·0950	11. 17	·01372			
2. 39	21. 45	1. 52	·0955	15. 46	·01500			
2. 50	22. 30	2. 6	·0964	20. 29	·01850			
3. 11	21. 0		***	22. 3	·01906			
3. 52	20. 30	2. 33	·0964	23. 59	·01865			
4. 39	17. 15	2. 45	·0972					
5. 34	15. 0	3. 20	·0958					
8. 40	14. 55		***					
9. 45	13. 0	4. 10	·0975					
10. 10	11. 30	4. 37	·0966					
11. 15	15. 50	5. 5	·0970					
12. 2	14. 0	5. 15	·0976					
12. 41	13. 20	5. 33	·0962					
13. 14	15. 55		***					
13. 50	15. 20	6. 57	·0966					
14. 11	17. 40		***					
14. 52	14. 20	7. 38	·0977					
15. 19	19. 20	7. 47	·0971					
15. 46	16. 0		***					
16. 5	16. 20	9. 46	·0971					
16. 21	13. 50	10. 6	·0977					
17. 7	9. 40		***					
17. 36	8. 30	12. 10	·0965					
17. 43	9. 10		***					
18. 4	7. 50	15. 25	·0967					
18. 13	8. 10	15. 46	·0974					
18. 24	6. 15		***					
18. 57	8. 10	17. 50	·0973					
19. 7	7. 5		***					
19. 55	8. 50	19. 47	·0960					
20. 15	8. 0		***					
20. 38	11. 10	22. 6	·0937					
20. 54	10. 15		***					
21. 15	11. 50	23. 32	·0938					
22. 6	17. 20		***					
22. 15	17. 10	23. 59	·0946					
22. 35	19. 15							
22. 58	18. 55							
23. 26	21. 0							
23. 40	20. 40							
23. 59	21. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 23		July 23		July 23		July 23		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 21. 0	0. 0	·0946	0. 0	·01865	1. 0	60·8	61·0
0. 15	22. 0		***	6. 40	·01949	3. 0	61·7	61·[illegible]
0. 24	21. 20	0. 46	·0955	14. 39	·01867	9. 0	62·0	62·5
0. 39	22. 5	1. 40	·0955	20. 27	·02152	21. 0	59·0	58·8
1. 21	22. 30	2. 4	·0961	23. 23	·02[illegible]4			
2. 10	24. 50	2. 52	·0958		(†)			
5. 24	16. 30		***					
6. 29	14. 0	5. 22	·0985					
6. 54	15. 5	5. 43	·0982					
9. 22	15. 40	6. 6	·09[illegible]4					
9. 57	14. 0	6. 30	·0981					
10. 31	9. 0		***					
11. 29	14. 20	9. 20	·0985					
11. 41	13. 40	9. 46	·0983					
11. 51	15. 30	10. 30	·0993					
12. 18	13. 45		***					
12. 43	16. 10	11. 38	·0975					
12. 51	14. 20	11. 49	·0978					
13. 9	15. 0	12. 20	·0975					
13. 36	14. 10	12. 40	·0980					
13. 47	17. 20		***					
14. 44	12. 5	13. 36	·0973					
16. 3	12. 30		***					
17. 30	8. 40	14. 17	·0989					
	***	15. 4	·0969					
18. 58	8. 0		***					
19. 13	6. 30	16. 52	·0977					
19. 28	8. 40	18. 15	·0972					
20. 10	10. 25	19. 0	·0962					
20. 21	8. 25	19. 45	·0963					
20. 33	12. 0		***					
20. 51	11. 15	22. 15	·0932					
21. 4	13. 30		***					
22. 22	14. 10	23. 59	·0940					
22. 45	17. 30							
23. 45	20. 40							
23. 54	20. 15							
23. 59	21. 10							
July 24		July 24		July 24		July 24		
0. 0	21. 21. 10	0. 0	·0940		(†)	1. 0	60·4	60·3
0. 10	21. 50	0. 22	·0930	1. 0	·01238	3. 0	61·0	61·0
0. 27	20. 55		***	3. 0	·01400	9. 0	62·0	63·0
1. 45	24. 40	2. 10	·0965	7. 20	·01326	21. 0	58·2	58·3
2. 55	25. 0	2. 30	·0962	13. 15	·01390			
3. 30	21. 30	2. 47	·0968	20. 0	·01728			
3. 55	22. 10	3. 15	·0960	22. 0	·01780			
4. 28	19. 0	3. 46	·0977	23. 59	·01730			
4. 36	19. 10		***					
5. 14	16. 15	4. 22	·0964					
6. 37	13. 40		***					
7. 14	14. 30	5. 47	·0972					
7. 44	14. 0		***					
10. 10	16. 5	7. 8	·0969					
	***	8. 34	·0973					
12. 3	14. 0	9. 30	·0969					
12. 30	16. 0		***					
13. 7	14. 40	12. 7	·0970					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
July 24	
h m	° ′ ″
13. 45	21. 14. 45
14. 0	13. 20
15. 12	12. 5
16. 23	12. 20
18. 28	8. 10
19. 48	7. 40
20. 57	9. 20
22. 21	14. 40
23. 33	18. 40 (†)
July 25	
	(†)
0. 13	21. 19. 10
1. 53	21. 30
3. 58	18. 50
5. 26	14. 30
6. 33	12. 55
7. 10	11. 0
7. 28	12. 10
7. 51	11. 40
8. 13	12. 50
10. 24	14. 50
11. 0	14. 10
12. 28	15. 15
13. 0	16. 55
13. 17	16. 10
13. 39	18. 30
14. 9	15. 0
15. 12	14. 0
15. 40	14. 50
15. 55	13. 20 ***
17. 45	10. 0 ***
18. 17	11. 30
18. 43	11. 15
18. 51	9. 0
18. 56	10. 0
19. 14	10. 30
19. 55	9. 45
21. 58	15. 10
22. 22	17. 15
23. 26	19. 45
23. 59	22. 45
July 26	
0. 0	21. 22. 45
0. 29	24. 50
1. 28	24. 0
2. 30	21. 50
3. 51	16. 20
5. 40	11. 45
8. 12	11. 10
9. 0	11. 50
9. 37	10. 15
10. 0	11. 40
July 26	
h m	° ′ ″
10. 21	21. 9. 50
10. 52	9. 50
11. 30	11. 40
12. 29	12. 20
12. 45	13. 40
12. 55	12. 30
14. 42	13. 0 ***
15. 12	14. 55 ***
17. 42	7. 50
17. 59	9. 20
18. 28	8. 40
18. 49	10. 50
19. 45	10. 20
20. 7	12. 20
21. 2	11. 50
22. 13	17. 30
23. 0	19. 40
23. 50	24. 0
23. 59	23. 55
July 27	
0. 0	21. 23. 55 ***
3. 53	18. 0
4. 57	15. 5
9. 30	13. 30
9. 51	11. 40
10. 40	13. 35
11. 0	12. 40
13. 30	14. 10
13. 45	16. 30
14. 7	13. 30
14. 20	16. 30
15. 19	9. 30
15. 56	10. 30 ***
18. 9	8. 0 ***
19. 21	11. 10
19. 43	10. 20
21. 6	12. 40
23. 4	19. 30
23. 59	22. 5

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
July 24	
h m	
12. 48	·0976
13. 48	·0969 ***
17. 33	·0975 ***
21. 20	·0940 ***
22. 13	·0937 ***
23. 36	·0948
23. 59	·0940
July 25	
0. 0	·0940
0. 47	·0941 ***
1. 35	·0940 ***
5. 4	·0956
5. 47	·0968
6. 50	·0971 ***
12. 46	·0972
13. 17	·0982
14. 16	·0973 ***
16. 4	·0971 ***
17. 4	·0976
17. 50	·0972
20. 6	·0941 ***
22. 5	·0938 ***
23. 3	·0945 ***
23. 59	·0940
July 26	
0. 0	·0940 ***
0. 50	·0946
1. 17	·0940
2. 30	·0954
2. 53	·0951 ***
4. 24	·0956 ***
5. 9	·0966 ***
July 26	
h m	
10. 29	·0973 ***
12. 40	·0967 ***
16. 40	·0978 ***
17. 50	·0973
19. 16	·0956 ***
20. 47	·0951
21. 20	·0956
22. 40	·0943
23. 59	·0950
July 27	
0. 0	·0950
1. 54	·0977
2. 7	·0966 ***
2. 36	·0970 ***
3. 47	·0970 ***
4. 45	·0956 ***
6. 5	·0970
6. 39	·0965 ***
7. 50	·0974
8. 20	·0973
8. 47	·0976 ***
9. 33	·0972
10. 23	·0979
10. 47	·0974
11. 6	·0977 ***
12. 50	·0965
13. 36	·0972
13. 47	·0979
14. 4	·0971
14. 20	·0980
14. 45	·0973
15. 5	·0974
15. 33	·0968
16. 17	·0971 ***
22. 40	·0954
23. 32	·0960
23. 59	·0960

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
July 25	
0. 0	·01730
0. 14	{ ·01732 ·01760
5. 30	·01366
6. 45	·01420
13. 27	·01532
21. 5	·01944
23. 59	·01850
July 26	
0. 0	·01850
3. 43	·01496
8. 50	·01850
13. 27:	·01948
20. 11	·02291
23. 0	·02367
23. 59	·02328
h m	
July 27	
0. 0	·02328
0. 55	·02280
4. 21	·01908
6. 0	{ ·02280 ·02527
8. 13	·02640
10. 42	·02677
14. 39	·02780
16. 30	·02922
21. 51	·03193
23. 59	·03234

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
July 25		
0. 0	59·0	58·5
1. 0	59·8	59·2
3. 0	60·0	60·0
6. 0	61·7	61·9
9. 0	61·4	61·9
12. 0	60·8	61·5
18. 0	55·8	57·0
21. 0	57·3	56·8
July 26		
0. 0	59·3	58·7
1. 0	60·0	60·0
3. 0	61·7	61·8
9. 7	63·0	63·0
21. 0	59·0	58·7
h m	°	°
July 27		
1. 0	61·7	61·6
3. 0	63·8	64·0
9. 0	65·0	65·9
21. 0	60·0	60·7

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 28		July 28		July 28		July 28		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 22. 5	0. 0	·0960	0. 0	·03234	1. 0	61·3	61·2
1. 52	26. 15	1. 30	·0962	2. 10	·03240	3. 0	62·7	62·9
2. 51	20. 40	1. 48	·0967	7. 19	·02950	9. 0	63·7	63·2
5. 20	15. 5	2. 22	·0969	12. 17	·02954	22. 24	60·0	60·0
7. 15	16. 5	2. 57	·0965	20. 45	·03320			
8. 13	14. 10		***	23. 59	·03364			
9. 52	16. 40	5. 9	·0973					
10. 0	16. 0	5. 26	·0971					
10. 45	15. 30		***					
11. 13	10. 0	7. 17	·0979					
11. 39	12. 40	8. 10	·0975					
12. 10	10. 30	8. 52	·0979					
13. 57	14. 40	9. 17	·0975					
14. 42	13. 30	9. 52	·0978					
15. 32	14. 50	10. 0	·0976					
17. 45	10. 20	10. 10	·0981					
18. 58	9. 40	10. 22	·0975					
19. 17	12. 15	10. 57	·0984					
19. 45	11. 0	11. 6	·0982					
19. 54	9. 0	11. 26	·0993					
20. 0	9. 30	11. 52	·0974					
20. 11	11. 40	12. 15	·0970					
20. 21	10. 30	12. 47	·0976					
20. 55	14. 30		***					
21. 9	13. 15	15. 53	·0977					
21. 20	13. 30	18. 36	·0966					
22. 0	19. 10	18. 58	·0970					
22. 17	18. 30		***					
23. 18	26. 10	20. 40	·0955					
23. 27	25. 50	20. 51	·0960					
23. 46	28. 20	21. 7	·0953					
23. 59	27. 50	22. 30	·0961					
		23. 30	·0964					
		23. 46	·0974					
		23. 59	·0968					
July 29		July 29		July 29		July 29		
0. 0	21. 27. 50	0. 0	·0967	0. 0	·03364	9. 0	63·0	63·5
	***		***	1. 17	·03330	21. 0	59·0	60·0
1. 0	27. 0	0. 36	·0976	3. 22	·03117			
1. 47	24. 50		***	4. 30	·02930			
2. 7	26. 10	1. 46	·0970	6. 40	·02822			
2. 27	24. 30		***	19. 0	·03360			
2. 40	25. 20	2. 17	·0984	21. 20	·03418 ·03309			
4. 7	17. 30	2. 26	·0977					
6. 7	14. 50	2. 45	·0986	23. 59	·03300			
9. 29	16. 20		***					
10. 12	15. 0	3. 18	·0977					
10. 44	7. 20	4. 4	·0950					
11. 10	10. 30		***					
11. 26	8. 20	6. 30	·0972					
12. 57	13. 30		***					
13. 29	12. 40	8. 8	·0978					
13. 41	14. 30	8. 30	·0973					
14. 10	12. 30	9. 17	·0982					
14. 57	15. 0		***					
15. 11	14. 20	10. 15	·0988					
15. 25	15. 10	10. 27	·0982					
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 29		July 29						
h m	° ′ ″	h m		h m		h m	°	°
17. 7	21. 9. 0	10. 45	·0989					
17. 15	10. 0	11. 15	·0969					
18. 10	7. 20		***					
18. 25	8. 40	11. 48	·0974					
18. 45	6. 30	12. 17	·0967					
19. 11	8. 20		***					
19. 35	7. 5	16. 42	·0978					
23. 36	20. 30		***					
23. 42	22. 30	20. 3	·0951					
23. 59	24. 0		***					
		23. 6	·0948					
		23. 59	·0958					
July 30		July 30		July 30		July 30		
0. 0	21. 24. 0	0. 0	·0958	0. 0	·03300	1. 0	62·3	62·4
0. 27	25. 0	1. 6	·0950	2. 51	·03090	3. 0	63·7	63·6
1. 28	24. 30	1. 27	·0960	6. 57	·02664	9. 0	65·0	66·0
1. 56	21. 50	1. 48	·0951	8. 49	·02742 ·02961	21. 0	60·3	60·8
2. 52	21. 50	2. 56	·0977					
4. 35	14. 10		***	11. 13	·02958			
5. 45	12. 0	4. 22	·0957	19. 23	·03472			
7. 42	15. 0		***	22. 45	·03473			
8. 15	14. 20	5. 33	·0976	23. 59	·03413			
9. 7	15. 0	6. 0	·0968					
9. 18	14. 10		***					
9. 52	14. 40	7. 8	·0961					
10. 29	11. 10	7. 40	·0970					
10. 43	11. 20	8. 10	·0965					
11. 0	9. 0		***					
11. 15	8. 0	9. 46	·0970					
11. 40	13. 15	9. 58	·0966					
	***	10. 17	·0973					
14. 13	14. 30		***					
	***	11. 12	·0961					
15. 15	13. 0		***					
	***	15. 56	·0974					
15. 51	14. 5	17. 58	·0972					
	***	21. 53	·0941					
16. 35	11. 40		***					
	***	22. 37	·0928					
16. 56	12. 30	22. 58	·0931					
	***	23. 59	·0926					
18. 42	8. 30							
	***							
19. 56	9. 0							
21. 40	14. 55							
23. 59	28. 45							
July 31		July 31		July 31		July 31		
0. 0	21. 28. 50	0. 0	·0926	0. 0	·03413	1. 0	63·2	62·8
0. 50	30. 20	1. 7	·0943	2. 15	·03330	3. 0	64·0	64·0
1. 27	29. 30	1. 56	·0952	5. 43	·03053	9. 0	64·7	65·2
1. 52	30. 0		***	8. 26	·02950	21. 0	61·7	62·0
4. 56	17. 30	3. 57	·0949	9. 0	·02760 ·03302			
6. 37	14. 20	4. 22	·0945					
7. 54	13. 30		***	12. 53	·03347			
11. 21	15. 5	5. 46	·0947	19. 54	·03390			
			***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
July 31	
h m	° ′ ″
11. 49	21. 16. 20
12. 23	14. 10
12. 51	16. 15
13. 29	14. 0
15. 15	14. 30
16. 13	13. 5
	***
20. 26	11. 20
21. 51	13. 40
23. 59	25. 0
Aug. 1	
0. 0	21. 25. 5
0. 14	26. 10
1. 20	27. 0
3. 15	21. 0
3. 20	25. 0
3. 35	21. 20
3. 52	21. 10
3. 56	22. 0
4. 30	18. 30
5. 50	14. 30
8. 38	13. 30
9. 28	12. 0
9. 51	14. 40
10. 47	12. 30
11. 14	10. 50
14. 40	11. 30
15. 16	14. 30
16. 43	8. 30
17. 7	12. 10
17. 21	10. 50
17. 43	13. 20
18. 1	10. 20
18. 14	11. 30
18. 29	5. 30
18. 38	7. 0
18. 43	6. 30
19. 12	21. 30
19. 24	18. 30
	***
20. 0	16. 55
20. 11	14. 40
20. 52	15. 10
21. 10	16. 30
21. 35	14. 10
	***
22. 14	16. 30
22. 40	21. 15
22. 48	20. 20
22. 59	22. 30
23. 13	20. 40
23. 24	22. 5
23. 43	21. 15
23. 59	22. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
July 31	
h m	
8. 17	·0964
10. 40	·0959
12. 7	·0965
12. 32	·0961
13. 5	·0966
13. 40	·0962
18. 50	·0964
22. 35	·0940
	***
23. 59	·0945
Aug. 1	
0. 0	·0945
0. 22	·0952
0. 36	·0950
1. 40	·0965
	***
3. 7	·0967
3. 15	·0996
3. 27	·0982
3. 36	·0986
3. 47	·0974
3. 52	·0987
4. 17	·0966
	***
5. 18	·0965
5. 54	·0976
	***
6. 36	·0972
6. 46	·0983
7. 0	·0972
7. 10	·0973
7. 16	·0989
7. 40	·0971
	***
8. 20	·0975
	***
8. 47	·0971
9. 14	·0984
9. 45	·0969
	***
10. 46	·0973
11. 7	·0967
	***
12. 8	·0973
	***
14. 4	·0971
15. 5	0976
15. 29	·0973
	***
16. 56	·0982
	***
17. 20	·0982
17. 52	·0964
18. 30	·0948
19. 4	·0970
19. 17	·0977
19. 28	·0971

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
July 31	
h m	
23. 15	·03590
	(†)
Aug. 1	
	(†)
1. 0	·03563*
1. 52	·03510
2. 39	·03453
3. 51	·03238
5. 42	{·03184 ·03294
6. 34	{·03280 ·03344
8. 28	·03282
11. 45	·03310
18. 26	·03565
19. 6	·03648
22. 48	·03788
	(†)

Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
h m	°	°
Aug. 1		
0. 0	62 ·2	62 ·8
1. 0	63 ·0	63 ·5
3. 0	64 ·9	65 ·7
6. 0	66 ·0	66 ·7
9. 0	66 ·3	67 ·1
12. 0	63 ·2	64 ·4
18. 0	62 ·0	62 ·8
21. 0	61 ·3	62 ·2

Greenwich Mean Solar Time.	Western Declination.
h m	° ′ ″
Aug. 2	
0. 0	21. 22. 30
0. 10	24. 0
2. 37	22. 0
3. 57	19. 5
4. 16	18. 55
4. 39	17. 0
4. 57	17. 30
5. 24	14. 50
7. 22	14. 0
7. 55	14. 45
8. 14	12. 20
8. 42	10. 0
9. 41	13. 20
10. 30	13. 15
10. 51	15. 0
11. 19	12. 0
11. 35	12. 40
11. 55	12. 0
12. 14	13. 15
12. 36	12. 30
12. 45	14. 15
13. 10	14. 0
13. 18	15. 10
13. 58	10. 20
14. 9	11. 0
14. 58	9. 40
15. 43	11. 40
16. 7	10. 30
16. 58	9. 40
17. 25	11. 0
17. 59	9. 10
19. 15	9. 20
19. 43	7. 30
20. 11	10. 45
20. 51	9. 40
21. 30	12. 40
21. 40	12. 15
23. 25	20. 5
23. 59	20. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Aug. 1	
h m	
19. 44	·0974
20. 0	·0967
20. 16	·0969
20. 52	·0965
21. 28	·0949
	***
21. 50	·0950
	***
22. 10	·0940
22. 20	·0942
22. 40	·0927
22. 52	·0927
23. 4	·0914
23. 22	·0929
23. 54	·0935
23. 59	·0940
Aug. 2	
0. 0	·0942
0. 5	·0948
0. 17	·0940
1. 15	·0949
	***
1. 50	·0947
2. 33	·0963
3. 5	·0959
3. 16	·0965
3. 40	·0966
3. 46	·0959
4. 6	·0964
4. 16	·0974
4. 30	·0960
5. 0	·0979
5. 17	·0967
5. 30	·0973
	***
6. 15	·0968
6. 24	·0974
6. 40	·0967
7. 15	·0976
	***
7. 46	·0979
8. 4	·0972
	***
9. 8	·0969
9. 17	·0973
	***
10. 7	·0963
10. 30	·0963
10. 45	·0968
10. 54	·0964
11. 18	·0969
11. 40	·0965
	***
12. 20	·0965
12. 37	·0969
13. 8:	·0962
13. 38	·0972
	***

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Aug. 2	
	(†)
1. 0	·03848*
2. 10	·03819
2. 44	{·03810 ·03606
9. 10	·03377
13. 45	·03355
20. 10	·03702
21. 23	{·03730 ·03592
22. 15	·03562
	(†)

Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
h m	°	°
Aug. 2		
0. 0	62 ·3	62 ·9
1. 0	62 ·7	63 ·2
3. 0	63 ·2	63 ·9
9. 0	63 ·7	64 ·4
21. 0	61 ·7	61 ·3

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
h m	° ′ ″	Aug. 2 h m		h m		h m	°	°
		14. 43	·0960					
			***					
		15. 52	·0965					
		18. 36	·0959					
		19. 42	·0946					
		21. 35	·0936					
			***					
		22. 15	·0938					
			(†)					
Aug. 3		Aug. 3		Aug. 3		Aug. 3		
0. 0	21. 20. 0		(†)		(†)	1. 0	64·0	64·6
0. 55	19. 30	0. 47	·0948	1. 35	·03416	3. 0	66·3	66·2
1. 45	21. 20		***	2. 28	·03377	9. 0	67·0	68·0
2. 25	21. 0	1. 20	·0955	6. 11	·03070	21. 0	63·2	63·8
4. 9	15. 20		***	8. 28	·03022			
	(†)	2. 15	·0943	13. 15	·03032			
6. 11	12. 40		***	18. 35	·03297			
9. 10	14. 40	4. 6	·0947	21. 54	·03433			
10. 28	12. 45		(†)	23. 59	·03416			
10. 54	12. 45	6. 14	·0960					
11. 14	13. 40	6. 46	·0970					
12. 13	12. 40	7. 7	·0964					
12. 31	14. 0		***					
13. 10	13. 30	8. 23	·0967					
13. 13	14. 30		***					
14. 0	14. 10	9. 16	·0961					
14. 30	15. 40	9. 40	·0965					
15. 13	13. 10		***					
15. 58	9. 45	10. 22	·0958					
17. 0	11. 30		***					
17. 36	8. 15	11. 7	·0963					
18. 5	10. 50	11. 34	·0956					
18. 12	9. 30		***					
18. 25	11. 0	12. 10	·0956					
19. 56	10. 0	12. 23	·0959					
20. 42	12. 20	12. 46	·0956					
21. 57	19. 40		***					
23. 59	24. 40	13. 28	·0961					
		14. 6	·0954					
		14. 42	·0961					
		14. 57	·0958					
		15. 53	·0962					
		16. 30	·0958					
			***					
		17. 20	·0961					
			***					
		20. 45	·0944					
		21. 27	·0943					
		21. 56	·0935					
			***					
		23. 7	·0933					
			***					
		23. 40	·0941					
		23. 46	·0936					
		23. 59	·0938					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 4 h m	° ′ ″	Aug. 4 h m		Aug. 4 h m		Aug. 4 h m	°	°
0. 0	21. 24. 40	0. 0	·0938	0. 0	·03416	1. 0	65·0	66·0
0. 58	26. 0	0. 30	·0945	4. 52	·03083	3. 0	66·7	67·3
1. 48	25. 30	0. 41	·0940	6. 15	·03282	9. 0	67·0	68·0
2. 58	22. 30	1. 4	·0947	6. 28	·03380	21. 45	59·8	60·2
3. 45	20. 40	1. 36	·0952	9. 14	·03313 ·03344			
4. 20	17. 45		(†)	11. 56	·03312			
6. 42	13. 10	2. 52	·0957	13. 13	·03384			
7. 0	13. 40	3. 4	·0955	19. 0	·04008			
	***		***	21. 13	·03882			
8. 21	9. 50	3. 40	·0964	23. 59	·03540			
	***	3. 47	·0956					
9. 40	13. 30	3. 52	·0960					
	***	4. 15	·0942					
10. 11	12. 50		***					
10. 39	15. 40	5. 20	·0944					
11. 5	9. 20		***					
11. 25	12. 40	6. 4	·0956					
11. 54	8. 0		***					
12. 25:	6. 30	6. 28	·0947					
12. 59	13. 40		***					
13. 15	12. 40	7. 17:	·0961					
13. 54	15. 15	7. 50	·0953					
14. 16	12. 10		***					
	***	10. 4	·0958					
17. 44	6. 30	10. 23	·0974					
17. 54	9. 0	10. 47	·0969					
	***	11. 8	·0977					
19. 55	7. 40	11. 42	·0969					
20. 10	6. 20	12. 7	·0950					
21. 5	10. 0		***					
23. 59	24. 50	13. 16	·0950					
		13. 52	·0965					
			***					
		18. 30	·0962					
			***					
		21. 42	·0927					
			***					
		23. 36	·0937					
		23. 59	·0945					
Aug. 5		Aug. 5		Aug. 5		Aug. 5		
0. 0	21. 24. 50	0. 0	·0945	0. 0	·03540	8. 55	66·3	67·2
0. 19	26. 0		***	2. 4	·03353	21. 0	63·0	64·0
1. 30	25. 5	0. 56	·0943	4. 9	·03060			
1. 52	23. 50		***	4. 40	·03130			
2. 37	22. 20	2. 36	·0967	4. 51	·03112			
4. 43	13. 50		***	4. 58	·03172			
6. 45	9. 45	3. 24	·0957	5. 37	·03120			
7. 24	10. 40		***	5. 56	·03160			
8. 30	9. 20	5. 5	·0950	6. 4	·03192			
9. 14	11. 20		***	6. 37	·03150			
9. 37	10. 5	6. 13	·0959	7. 0	·03210			
11. 0	11. 40		***	7. 40	·03173			
11. 20	12. 30	8. 17	·0962	8. 10	·03230			
12. 5	11. 50	8. 56	·0957	10. 40	·03211			
12. 26	13. 10	9. 52	·0966	18. 11	·03665			
12. 52	10. 40	10. 30	·0959	23. 59	·03780			
13. 51	9. 30	13. 9	·0962					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 5		Aug. 5						
h m	° ′ ″	h m		h m		h m	°	°
14. 7	21. 10. 0	14. 18	·0970					
16. 36	6. 30	15. 7	·0965					
17. 10	7. 30	15. 32	·0969					
17. 55	6. 40	17. 40	·0965					
18. 36	8. 0	21. 15	·0943					
20. 12	16. 20	23. 17	·0946					
20. 26	16. 20	23. 59	·0950					
21. 15	20. 0							
21. 45	20. 20							
22. 24	21. 50							
22. 48	22. 0							
	(†)							
Aug. 6		Aug. 6		Aug. 6		Aug. 6		
	(†)	0. 0	·0950	0. 0	·03780	1. 0	63 ·8	64 ·7
0. 21	21. 22. 0	0. 46	·0962	4. 8	·03669	3. 0	64 ·0	65 ·0
0. 44	23. 30		***	11. 6	·03810	9. 0	61 ·5	63 ·0
1. 44	20. 40	1. 30	·0956		(†)	21. 0	56 ·0	55 ·3
1. 57	21. 20	2. 0	·0966	20. 35	·03110			
3. 14	17. 5		***	21. 15	{ ·03088			
4. 55	15. 45	3. 47	·0969		·02900			
5. 40:	11. 0	4. 6	·0978	23. 23	·02945			
6. 27	13. 20	4. 13	·0971		(†)			
8. 51	13. 0	4. 40	·0978					
10. 29	21. 14. 10	4. 47	·0974					
	(†)		***					
21. 0	20. 57. 1*	5. 50:	·0998					
21. 35	21. 0. 0	6. 15	·0987					
21. 48	21. 8. 0		***					
21. 57	20. 54. 30	9. 40	·0969					
22. 12	21. 16. 30		***					
22. 15	12. 20	10. 20	·0970					
22. 40	32. 45		(†)					
	***	21. 0	·0819*					
23. 7	21. 40	21. 30	·0830					
23. 12	22. 30	21. 42	·0844					
23. 21	19. 30	21. 46	·0809					
23. 33	24. 0	21. 48	·0833					
23. 51	17. 0	22. 2	·0813					
	***	22. 36	·0916					
23. 59	16. 50	22. 40	·0908					
		22. 47	·0922					
		22. 50	·0904					
		23. 6	·0922					
		23. 10	·0904					
		23. 15	·0911					
		23. 17	·0902					
		23. 35	·0941					
		23. 40	·0922					
		23. 59	·0956					
Aug. 7		Aug. 7		Aug. 7		Aug. 7		
0. 0	21. 16. 50	0. 0	·0956		(†)	1. 0	61 ·3	60 ·7
0. 14	19. 30	0. 4	·0961	0. 11	·02883	3. 0	62 ·7	63 ·2
0. 27	14. 40	0. 7	·0941	1. 22	·02720	9. 0	63 ·6	64 ·9
	***	0. 18	·0975	2. 0	·02883	21. 0	57 ·8	58 ·3
0. 48	32. 0	0. 38	·0920	2. 15	·02870			
1. 7	29. 50	0. 45	·0948	3. 14	·03144			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 7		Aug. 7		Aug. 7				
h m	° ′ ″	h m		h m		h m	°	°
1. 52	21. 20. 0	0. 54	·0931	4. 13	·02543			
1. 58	29. 30		(†)	6. 48	{ ·02920			
2. 17	21. 40	1. 0	·0936*		·03103			
2. 30	25. 0	3. 0	·1057*	7. 42	·03063			
2. 51	17. 50	3. 42	·0960	8. 42	·03112			
2. 58	21. 10	4. 2	·0994	11. 23	·03176			
3. 7	14. 30	4. 5	·0982	11. 46	·03110			
3. 24	20. 0	4. 17	·0997	12. 46	·03183			
3. 30	10. 40	4. 23	·0964	17. 0	·03622			
	***	4. 32	·0970	21. 0	·03893			
3. 55	16. 0	4. 43	·0956	23. 59	·03830			
4. 13	21. 50	5. 15	·0967					
4. 21	20. 30		***					
4. 26	22. 30	5. 46	·0937					
4. 51	16. 0		***					
4. 57	17. 0	6. 13	·0920					
	***	6. 18	·0928					
6. 50	13. 20	6. 36	·0914					
7. 44	17. 30	6. 46	·0924					
8. 59	17. 0		***					
9. 13	13. 40	8. 0	·0923					
9. 28	16. 0	8. 13	·0935					
9. 52	6. 45	8. 27	·0926					
10. 7	12. 0		***					
10. 27	13. 50	9. 6	·0935					
10. 51	13. 0	9. 10	·0923					
11. 15	20. 30		***					
11. 45	7. 0	9. 37	·0922					
12. 0	16. 30	9. 57	·0945					
	***		***					
13. 50	12. 30	10. 26	·0921					
14. 14	13. 40		***					
	***	11. 5	·0919					
18. 35	9. 20	11. 16	·0943					
19. 20	12. 0	11. 36	·0915					
20. 11	10. 30	11. 50	·0948					
	***		***					
21. 25	16. 0	12. 13	·0928					
22. 7	15. 0		***					
22. 14	16. 50	14. 26	·0923					
22. 22	15. 30		***					
22. 52	17. 30	15. 20	·0934					
23. 59	23. 0		***					
		19. 6	·0917					
			***					
		19. 50	·0925					
			***					
		21. 2	·0918					
			***					
		22. 13	·0928					
		22. 26	·0918					
		22. 58	·0927					
		23. 10	·0939					
			***					
		23. 59	·0938					
Aug. 8		Aug. 8		Aug. 8		Aug. 8		
0. 0	21. 23. 0	0. 0	·0938	0. 0	·03830	0. 0	58 ·6	59 ·
	***	0. 7	·0944	1. 41	·03540	1. 0	59 ·0	59 ·

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.								Of H.F. Magnet.	Of V.F. Magnet.
Aug. 8		Aug. 8		Aug. 8		Aug. 8			Aug. 8		Aug. 8						
h m	° ′ ″	h m		h m		h m		°	h m	° ′ ″	h m		h m			°	
0. 43	21. 23. 30	0. 13	·0929	2. 35	·03878	3. 0	60 ·0	61 ·0	14. 11	21. 15. 20	16. 26	·0940					
	(†)	0. 20	·0934		***	6. 0	61 ·6	62 ·0	14. 28	8. 10	16. 32	·0951					
1. 39	5. 40	0. 26	·0927	3. 11	·03579	9. 10	62 ·0	63 ·0	15. 7	20. 30	16. 35	·0896					
1. 45	16. 35	0. 37	·0935		***	12. 0	61 ·6	62 ·0		***	16. 37	·0960					
1. 51	24. 40		(†)	3. 17	·03696	18. 0	59 ·8	62 ·3	16. 21	15. 0	16. 40	·0912					
1. 58	19. 50	1. 0	·0917*	3. 30	·03570	21. 0	60 ·0	61 ·3	16. 29	19. 30	16. 46	·0952					
2. 8	22. 0	3. 0	·1074*	3. 56	·03840					(†)	16. 50	·0904					
2. 11	36. 30	7. 17	·0995	4. 11	·03532				19. 12	17. 0	16. 56	·0943					
2. 28	15. 0	7. 30	·0978	4. 24	·03943					***	17. 2	·0905					
2. 34	22. 30	7. 35	·1005	4. 30	·03850				20. 40	13. 30	17. 6	·0956					
2. 44	16. 15	7. 47	·0961	4. 37	·03880					***	17. 8	·0922					
2. 52	23. 40	7. 59	·0951	4. 41	·03853				21. 40	19. 30	17. 16	·0954					
2. 57	22. 0	8. 7	·0969	4. 44	·03922					***	17. 18	·0915					
3. 15	36. 0	8. 16	·0949	4. 50	·03750				21. 48	17. 0	17. 26	·0948					
	(†)	8. 20	·0976		***					***	17. 35	·0920					
3. 54	36. 10		***	5. 30	·03670				22. 12	23. 40	17. 42	·0952					
4. 0	40. 20	8. 37	·0946	5. 35	·03562					***		***					
4. 20	28. 15	8. 46	·0976		***				22. 16	20. 0	18. 26	·0918					
4. 24	32. 0	9. 15	·0918	6. 43	·03573					***	18. 32	·0925					
4. 30	35. 15	9. 40	·0943	6. 52	·03680				22. 58	19. 30	18. 44	·0864					
4. 42	19. 30	9. 47	·0930	7. 21	·03441					***	18. 47	·0928					
4. 45	24. 0	10. 3	·0947	7. 51	·03292				23. 13	10. 30	18. 50	·0892					
4. 54	15. 30	10. 6	·0938	8. 15	·03233				23. 26	19. 40	18. 57	·0918					
5. 0	17. 0	10. 16	·0960	8. 26	·03260					***	18. 59	·0862					
5. 6	13. 20	10. 24	·0942	8. 37	·03222				23. 59	17. 40	19. 3	·0912					
5. 15	29. 0		***	8. 43	·03250						19. 7	·0882					
5. 29	15. 30	11. 0	·0960	9. 15	·03090						19. 13	·0932					
5. 30	21. 15		***		***						19. 17	·0886					
	***	11. 30	·0942	13. 56	·03067						19. 19	·0922					
6. 11	30. 30		***	14. 39	·02997						19. 30	·0910					
6. 16	27. 50	11. 46	·0958	14. 58	·03000							***					
6. 21	38. 0	11. 58	·0939	15. 12	·03052						19. 47	·0896					
6. 30	25. 15	12. 7	·0933		***							***					
6. 36	21. 25. 50	12. 17	·0946	21. 10	·03290						20. 10	·0905					
7. 10	20. 51. 30		***	23. 59	·03328						20. 16	·0888					
7. 44	21. 25. 0	12. 36	·0933									***					
7. 59	18. 15	12. 40	·0964								20. 36	·0916					
	***	12. 45	·0940									***					
8. 26	22. 40	12. 53	·0966								21. 40	·0928					
8. 40	14. 30	13. 4	·0952								21. 43	·0912					
9. 7	30. 45	13. 6	·0964									***					
9. 42	13. 30	13. 14	·0948								21. 52	·0946					
9. 51	17. 30	13. 17	·0964								21. 57	·0920					
9. 58	16. 0	13. 26	·0958								22. 2	·0937					
	***	13. 35	·0966									***					
10. 15	17. 10	13. 40	·0954								22. 8	·0896					
	***	13. 46	·0967								22. 18	·0935					
10. 52	13. 5	13. 57	·0932									***					
	***		***								22. 30	·0893					
11. 28	16. 0	14. 16	·0947								22. 46	·0926					
	***		***								22. 47	·0893					
11. 40	13. 0	14. 47	·0910								22. 50	·0928					
	***		***								23. 0	·0891					
12. 58	17. 20	15. 38	·0946								23. 5	·0931					
	***		***								23. 7	·0904					
13. 41	12. 50	15. 50	·0932								23. 18	·0946					
13. 51	16. 30	16. 7	·0935								23. 20	·0914					
14. 0	13. 20	16. 14	·0935								23. 27	·0946					
			***														

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
h m	° ′ ″
Aug. 9	
0. 0	21. 17. 40
	***
0. 28	17. 35
0. 40	24. 30
	***
1. 10	21. 0
1. 36	25. 0
	***
1. 45	30. 30
1. 58	27. 0
	***
2. 9	27. 40
	***
2. 14	26. 10
2. 19	29. 50
2. 25	28. 30
2. 39	35. 50
2. 49	15. 40
3. 0	19. 20
3. 11	15. 40
3. 14	22. 45
3. 27	14. 0
3. 40	20. 40
3. 45	19. 30
4. 0	27. 15
4. 13	27. 0
4. 17	35. 40
4. 30	26. 50
4. 34	30. 20
4. 53	17. 30
4. 56	20. 30
5. 7	20. 5
5. 22	25. 30
5. 43	18. 0
5. 57	23. 50
6. 14	13. 30
7. 0	17. 10
7. 14	3. 10
7. 22	25. 0
7. 27	22. 30
7. 37	36. 0
7. 46	22. 30
8. 0	28. 50
	(†)
8. 45	18. 20
8. 51	22. 50
8. 54	21. 20
8. 56	24. 30
9. 0	20. 0
9. 13	15. 20
	***
9. 28	21. 0
Aug. 9	
h m	° ′ ″
9. 41	21. 19. 0
9. 44	20. 30
10. 0	12. 0
10. 14	17. 30
10. 28	17. 30
10. 45	15. 40
10. 51	18. 0
	***
11. 41	14. 0
11. 56	20. 0
	***
13. 29	11. 30
13. 50	18. 35
14. 7	13. 40
14. 17	17. 40
14. 28	16. 45
14. 39	20. 10
	***
15. 30	13. 0
	***
16. 40	13. 30
17. 0	18. 30
17. 15	12. 15
	***
17. 28	15. 45
	***
17. 56	10. 0
	***
18. 39	16. 40
	***
18. 57	10. 30
	***
19. 13	23. 0
	***
19. 55	17. 40
20. 7	7. 30
20. 25	20. 20
20. 45	12. 15
20. 57	17. 0
21. 21	17. 0
21. 27	20. 30
21. 42	21. 0
21. 49	24. 25
	***
22. 27	21. 0
22. 37	24. 0
	***
23. 7	21. 10
23. 19	27. 30
23. 30	25. 30
	(†)
Aug. 10	
	(†)
0. 12	21. 26. 30
	***
0. 52	21. 50
	***

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Aug. 8	
h m	
23. 30	·0915
23. 40	·0945
23. 43	·0930
	(†)
Aug. 9	
	(†)
1. 0	·0935*
3. 0	·0902*
9. 0	·0971*
9. 25	·0962
9. 32	·0971
9. 37	·0941
9. 40	·0961
9. 46	·0924
10. 0	·0956
10. 7	·0946
10. 16⁚	·0958
10. 35	·0930
10. 47	·0944
	***
11. 8⁚	·0932
11. 30⁚	·0948
11. 52	·0946
12. 4	·0937
12. 9	·0948
12. 14	·0940
12. 17	·0959
12. 20	·0934
	***
12. 38	·0947
12. 45	·0981
	***
12. 48	·0955
12. 53	·0971
	***
13. 30	·0952
13. 33	·0972
13. 37	·0951
13. 44	·0964
13. 48	·0945
13. 50	·0958
	***
15. 16	·0970
15. 24	·0980
	***
16. 7	·0956
	***
16. 33	·0960
16. 37	·0976
16. 43	·0946
16. 46	·0964
17. 5	·0934
	***
17. 37	·0954
17. 40	·0942
17. 46	·0971
	***
Aug. 9	
h m	
17. 48	·0934
	***
18. 5	·0967
18. 8	·0940
18. 14	·0960
	***
19. 5	·0941
19. 13	·0964
19. 27	·0940
19. 40	·0957
	***
20. 4	·0932
20. 10	·0968
20. 17	·0941
20. 32	·0958
	***
20. 42	·0926
20. 47	·0954
20. 53	·0928
21. 6	·0946
	***
21. 41	·0950
	***
23. 0	·0939
23. 30	·0915
	(†)
Aug. 10	
	(†)
1. 0	·0926*
3. 0	·0974*
5. 50	·0955
5. 54	·0943

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Aug. 9	
0. 0	·03328
2. 25	·03292
2. 51	·03486
3. 6	·03420
3. 12	·03470
3. 29	·03391
3. 45	·03222
3. 52	·03270
4. 0	·03218
4. 54	·03220
5. 20	·03084
7. 0	·02986
7. 15	·03178
7. 42	·02810
8. 10	·02823
8. 20	·02898
8. 45	·02790
12. 12	·02892
12. 48	·02868
13. 39	·02850
22. 43	·03307
23. 59	·03300
h m	
Aug. 10	
0. 0	·03300
1. 9	·03300
2. 11	·03202
2. 39	·03230
4. 24	·02948
	***

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Aug. 9		
0. 0	60·8	61·7
1. 0	61·3	62·0
3. 0	63·0	64·0
9. 0	63·0	64·0
21. 0	58·2	59·9
h m	°	°
Aug. 10		
1. 0	61·9	62·7
3. 0	64·0	65·7
9. 0	65·7	66·5
21. 0	60·0	60·2

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁚ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug.10		Aug.10		Aug.10				
h m	° ′ ″	h m		h m		h m	°	°
1.30	21.28.50	6.15	·0970	4.57	·02990			
1.43	24. 0	6.29	·0958	5. 6	·03100			
1.49	25. 0		***	5.24	·02926			
1.57	26.40	7.20	·0978	6.53	·03080			
2. 8	28.30		***	8.22	·03145 ·03280			
2.27	20.15	7.36	·0950	10.56	·03240			
2.37	17. 0		***	11.13	·03172			
2.50	21.20	8.46	·0945	11.23	·02930			
3. 2	16.40		***	11.30	·03020			
3.18	16.35	9.20	·0965	12. 0	·02438			
	***	9.23	·0954	12.43	·03139			
3.50	29. 0	9.27	·0964	12.50	·03045			
4. 0	22.20	9.32	·0956	12.56	·03090			
4.13	25.20	9.40	·0964	13. 7	·03020			
4.19	19.40	9.46	·0954	13.29	·03048			
4.28	22.30		***	13.57	·03270			
4.39	19.40	10.16	·0974	14.35	·03368			
4.41	31. 0		***	14.43	·03322			
4.45	28.20	10.32	·0957		(†)			
4.48	31. 5		***	21. 0	·03810			
5. 6	12. 0	10.51	·0988	21.55	·03844			
5.12	19.40	11. 5	·0966	23.59	·03750			
5.26	12. 0	11.13	·1088					
5.28	14.10	11.17	·1050					
5.39	10.20	11.20	·1102					
5.44	14.30	11.26	·1050					
5.56	15.55	11.37	·0916					
6. 6	14.30	11.45	·0971					
6.22	17.30	11.50	·0884					
	***	11.56	·0898					
6.54	19. 0	12. 5	·0844					
7. 9	17. 0	12.17	·0910					
	***	12.36	·0978					
7.40	22. 5	12.38	·0960					
8.12	17.30		***					
	***	13.10	·0914					
8.28	18. 0		***					
8.40	16.30	13.45	·0946					
	***		***					
9.44	19 30	14. 0	·0944					
10.17	2.10	14. 8	·0950					
10.40	15.20		(†)					
11. 6	20. 0	21. 0	·0911*					
	(†)							
11.44	31.30							
11.53	39.30							
12. 2	24.50							
12. 7	27.10							
12.29	12. 0							
12.31	13.10							
12.39	5.10							
12.42	16.30							
13. 0	30. 0							
13.27	12.20							
13.41	6.30							
13.45	9.20							
13.55	6.20							
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug.10								
h m	° ′ ″	h m		h m		h m	°	°
14.25	21.20. 0							
	(†)							
21. 0	11.40*							
Aug 11		Aug.11		Aug.11		Aug.11		
	(†)		(†)	0. 0	·03750	1. 0	63·0	63·1
1. 0	21.21.40*	1. 0	·0938*	0. 5	·03745 ·03492	3. 0	64·3	65·0
1. 7	21.30	1.57	·0940		***	9. 0	65·6	66·1
	***		***	2.45	·03368	22.30	61·5	62·3
3. 8	18.40	2.50	·0946		***			
3.20	21.10	2.56	·0931	5.21	·03130			
3.31	18.30	3. 7	·0978	10. 9	·02912			
	***	3.10	·0952	11. 0	·02940			
5.43	16.45	3.15	·0966	11.44	·02880			
6. 0	8.45	3.17	·0982	11.49	·02890			
	***	3.24	·0932	19.14	·03234			
7.15	14.50		***	21.38	·03308			
7.50	14.30	3.37	·0946	21.52	·03120			
8. 7	17. 5	3.40	·0920	22. 4	·03450			
8.15	14.20	3.46	·0939	22.13	·03100			
8.26	16.30	3.48	·0938	22.20	·03518			
8.43	12. 0	3.52	·0974		***			
9.11	1.10		***	23.59	·03480			
9.26	21. 8. 0	4. 6	·0941					
9.45	20.52.50		***					
9.57	21.11.35	4.17	·0962					
10.10	13.40	4.20	·0979					
10.21	11.20	4.24	·0956					
10.44	13.40	4.33	·0974					
11.17	24. 0	4.36	·0957					
11.48	14.30	4.40	·0962					
12. 0	13.10	4.44	·0946					
12.35	17.50	4.47	·0999					
12.51	12. 0	4.50	·0966					
12.58	13.40	4.56	·0997					
13.12	11. 0	5. 4	·0950					
14. 5	12.30	5.16	·0974					
14.28	17.30	5.20	·0946					
14.40	17.50	5.26	·0971					
15.12	13. 0	5.32	·0956					
15.52	12.20	5.37	·0984					
16.15	13.30	5.40	·0967					
16.40	16.30	5.46	·0941					
17.12	16.45	5.55	·0962					
17.26	13.40	6. 6	·0980					
17.39	16. 0		***					
18.11	15.50	6.30	·0956					
18.25	12. 0	6.37	·0968					
18.43	14.50	6.45	·0948					
18.51	12.30	6.50	·0961					
19. 9	17.50		***					
19.13	15.10	7. 7	·0966					
19.19	18.40	7.15	·0954					
19.57	14.30		***					
20. 7	18.30	7.30	·0980					
20.14	15.25	7.36	·0950					
20.39	11.10		***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug.11		Aug.11						
h m	° ′ ″	h m		h m		h m	°	°
20. 50	21. 19. 10	7. 50	·0970					
	(†)	7. 53	·0987					
22. 30	20. 2*	8. 4	·0958					
		8. 16	·0981					
		8. 20	·0967					
		8. 36	·0968					
		8. 45	·0954					
		9. 5	·0977					
		9. 16	·1000					
		9. 30	·0960					
		9. 43	·1028					
		9. 47	·0972					
		10. 5	·0941					
		10. 22	·0950					
		10. 45	·0943					
			***					
		11. 17	·0952					
			***					
		11. 43	·0942					
			***					
		12. 28	·0964					
		12. 36	·0942					
		12. 58	·0956					
		13. 2	·0947					
			***					
		13. 57	·0955					
			***					
		14. 36	·0945					
			***					
		15. 30	·0956					
			***					
		16. 18	·0951					
			***					
		16. 53	·0930					
			***					
		17. 26	·0912					
		18. 15	·0925					
		18. 34	·0910					
		18. 43	·0891					
		18. 52	·0863					
		18. 56	·0870					
			***					
		19. 27	·0882					
		19. 32	·0866					
		19. 43	·0882					
			***					
		19. 51	·0845					
		20. 4	·0872					
			***					
		20. 16	·0854					
		20. 22	·0863					
		20. 36	·0842					
		20. 46	·0875					
			(†)					
		22. 30	·0914*					
Aug.12		Aug.12		Aug.12		Aug.12		
	(†)		(†)	0. 0	·03480	8. 0	64 ·5	64 ·5
0. 45	21. 32. 50	4. 30	·0956		***	21. 0	61 ·2	62 ·3

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug.12		Aug.12		Aug.12				
h m	° ′ ″	h m		h m		h m	°	°
0. 51	21. 34. 30	4. 46	·1002	0. 42	·03442			
1. 14	20. 30	4. 48	·1090	1. 9	·03608			
1. 16	22. 30	4. 52	·1104		***			
1. 20	21. 30	4. 57	·1060	1. 21	·03525			
1. 27	24. 0	5. 5	·1116	1. 30	·03608			
1. 33	22. 0	5. 15	·1091	1. 35	·03557			
1. 41	23. 5	5. 22	·1139		***			
1. 43	21. 30	5. 36	·1114	2. 10	·03750			
1. 47	22. 30	5. 43	·1098	2. 18	·03718			
1. 59	34. 0	5. 46	·1120	2. 59	·04160			
2. 6	30. 50	5. 57	·1034		***			
2. 15	36. 45		***	3. 43	·03882			
2. 19	33. 45	6. 7	·1055	3. 50	·03980			
2. 23	34. 30	6. 22	·1026	4. 8	·03780			
2. 36	30. 45	6. 26	·1043		***			
2. 44	36. 20	6. 40	·0969	4. 42	·03851			
2. 53	34. 0	6. 46	·0994	4. 49	·03795			
	(†)	6. 58	·0957	4. 58	·04080			
3. 38	31. 40	7. 6	·0965	5. 19	·03530			
3. 59	14. 20	7. 13	·0932	5. 29	·03563			
4. 11	14. 10	7. 16	·0946	5. 45	·03510			
4. 15	12. 0	7. 26	·0920	5. 51	·03620			
4. 33	27. 40	7. 35	·0962	6. 22	·03369			
4. 44	23. 0	7. 42	·0907	6. 30	·03407			
4. 48	34. 0	7. 45	·0924	6. 39	·03340			
4. 56	27. 15	7. 47	·0882	6. 57	·03304			
4. 59	29. 0	7. 49	·0894	7. 22	·03360			
5. 1	26. 50	7. 52	·0870	7. 28	·03163			
5. 7	21. 28. 10	8. 6	·0955	7. 31	·03222			
5. 31	20. 58. 0	8. 8	·0882	7. 43	·02828			
5. 39	21. 27. 15	8. 17	·0936	7. 48	·02880			
5. 45	17. 0	8. 36	·0910	7. 52	·02822			
5. 48	32. 10		***	8. 15	·03220			
5. 55	24. 45	8. 51	·0931	9. 10	·03333			
6. 0	29. 50	9. 4	·0905	9. 26	·03200			
6. 13	10. 0	9. 10	·0987		***			
6. 21	20. 50	9. 17	·0960	10. 15	·03051			
6. 24	19. 30	9. 22	·0998	10. 46	·03144			
6. 43	23. 45	9. 37	·0943	11. 10	·02900			
6. 47	21. 30	9. 46	·0979	11. 14	·02955			
6. 54	25. 0		***	11. 44	·02622			
7. 0	21. 20	10. 5	·0920	11. 56	·02790			
7. 12	26. 0	10. 8	·0942	12. 9	·02771			
7. 23	20. 5	10. 17	·0903	12. 56	·03030			
7. 28	23. 0		***	13. 5	·03010			
	***	10. 30	·0916	13. 21:	·03156			
7. 41	23. 30	10. 35	·0904	13. 54	·02864			
7. 43	22. 0	10. 40	·0922	17. 21:	·03360			
7. 45	21. 30. 50	10. 42	·0903	21. 30	·03490			
7. 54	20. 57. 55	10. 47	·0927	22. 22	·03548			
7. 58	21. 29. 0	11. 7	·0780	23. 46	·03690			
8. 11	20. 40	11. 32	·0878	23. 59	·03673			
8. 14	32. 55	11. 40	·0854					
8. 27	11. 15	12. 1	·0930					
8. 31	15. 30		***					
8. 43	11. 30	12. 25	·0898					
8. 57	14. 30		***					
9. 0	13. 0	13. 2	·0924					
9. 13	19. 20	13. 10	·0898					

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Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Aug.12		Aug.12						
h m	° ′ ″	h m		h m		h m	°	°
9. 17	21. 17. 20	13. 23	·0924					
9. 22	21. 40	13. 30	·0918					
9. 28	17. 30	13. 45	·0958					
9. 42	25. 30	13. 55	·0897					
9. 46	18. 20	14. 4	·0923					
9. 52	21. 5		***					
9. 59	17. 20	14. 25	·0940					
10. 3	18. 30	14. 39	·0918					
10. 12	12. 40	15. 3	·0938					
10. 15	14. 30	15. 20	·0934					
10. 29	6. 30	15. 40	·0911					
10. 43	10. 30	16. 10	·0924					
10. 46	9. 50	16. 17	·0917					
11. 11	29. 30	16. 30	·0931					
11. 17	26. 55		***					
11. 30	31. 40	17. 40	·0934					
11. 52	31. 10		***					
12. 4	27. 0	18. 41	·0922					
12. 15	34. 30		***					
12. 49	15. 20	20. 0	·0923					
12. 55	14. 0		***					
12. 59	14. 40	20. 52	·0889					
13. 9	6. 10	21. 34	·0834					
13. 43	41. 30	21. 43	·0858					
14. 16	10. 30		***					
14. 25	10. 40	22. 20	·0866					
14. 40	21. 2. 30	22. 26	·0883					
14. 57	20. 59. 0	22. 33	·0871					
15. 13	21. 1. 30	22. 45	·0898					
15. 27	0. 20	22. 53	·0911					
15. 40	5. 15	23. 10	·0928					
15. 45	4. 0	23. 30	·0915					
16. 12	8. 0	23. 36	·0944					
16. 21	6. 10	23. 42	·0932					
16. 42	8. 30		(†)					
	***							
17. 15	8. 0							
17. 29	5. 50							
	***							
18. 38	11. 0							
	***							
19. 14	9. 30							
19. 21	12. 20							
	***							
20. 34	12. 20							
20. 40	13. 45							
20. 48	13. 20							
21. 10	16. 30							
	***							
21. 40	10. 40							
21. 52	15. 30							
21. 58	14. 45							
22. 12	18. 20							
22. 15	16. 0							
22. 22	17. 10							
	***							
22. 46	12. 30							
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Aug.12								
h m	° ′ ″	h m		h m		h m	°	°
23. 10	21. 14. 30							
23. 18	13. 30							
23. 26	14. 40							
23. 37	10. 45							
23. 43	14. 0							
23. 45	14. 20							
23. 59	14. 30							
Aug.13		Aug.13		Aug.13		Aug.13		
0. 0	21. 14. 30		(†)	0. 0	·03673	1. 0	63·2	64·0
0. 9	15. 20	1. 0	·0982*	0. 26	·03728	3. 0	64·7	66·0
0. 14	12. 30	1. 40	·0959	0. 40	·03670	9. 0	65·5	66·0
0. 19	11. 30		***	0. 46	·03708	21. 0	61·7	62·3
0. 29	13. 30	2. 26	·0953	2. 7	·03590			
0. 44	18. 0	2. 45	·0968	4. 45	·03272			
0. 51	12. 30	3. 7	·0940	5. 57	·03200			
0. 57	18. 20	3. 26	·0999	7. 10	·03070			
1. 11	14. 15	3. 53	·0944		·03203			
1. 44	19. 30		***	8. 52	·03037			
1. 58	20. 40	4. 7	·0938	9. 45	·03018			
2. 10	18. 50	4. 36	·0959	10. 13	·02944			
2. 14	19. 55	4. 48	·0938	10. 58	·03000			
2. 36	17. 40		***	11. 22	·02966			
2. 48	19. 50	5. 43	·0952	21. 40	·03470			
3. 26	16. 45	5. 59	·0970	23. 59	·03420			
3. 36	13. 20	6. 6	·0982					
3. 47	17. 30	6. 10	·0974					
4. 11	14. 45	6. 15	·0988					
4. 22	16. 45	6. 22	·0967					
4. 29	15. 30	6. 37	·0960					
4. 31	16. 30	6. 46	·0979					
4. 43	12. 30	7. 0	·0971					
5. 28	11. 20	7. 5	·0978					
6. 3	16. 10	7. 8	·0967					
6. 44	9. 30	7. 10	·0976					
7. 0	12. 50	7. 16	·0965					
7. 28	6. 0	7. 21	·0976					
7. 41	5. 20		***					
7. 49	10. 10	7. 47	·0954					
7. 58	5. 30	8. 0	·0980					
8. 5	12. 40	8. 5	·0962					
8. 11	10. 40	8. 10	·0977					
8. 19	16. 0	8. 26	·0963					
8. 44	13. 45	8. 47	·0963					
8. 59	17. 30	9. 17	·0933					
9. 43	5. 0	9. 32	·0930					
9. 54	6. 0	9. 45	·0946					
10. 9	17. 30		***					
10. 18	20. 25	10. 15	·0950					
10. 40	15. 0	10. 26	·0934					
10. 49	13. 45		***					
11. 28	21. 30	11. 5	·0949					
11. 44	17. 30	11. 11	·0960					
11. 47	18. 20	11. 35	·0940					
12. 12	14. 50		***					
12. 26	16. 30	12. 22	·0950					
	***		***					
13. 55	13. 20	12. 54	·0941					
	***							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 13		Aug. 13						
h m	° ′ ″	h m		h m		h m	°	°
15. 20	21. 16. 20	13. 20	·0950					
	***	13. 45	·0942					
19. 17	9. 10		***					
	***	16. 46	·0949					
20. 28	10. 10		***					
20. 40	12. 0	21. 37	·0925					
20. 48	11. 20		***					
23. 15	23. 0	23. 59	·0950					
23. 59	24. 0							
Aug. 14		Aug. 14		Aug. 14		Aug. 14		
0. 0	21. 24. 0	0. 0	·0950	0. 0	·03420	1. 0	64·0	65·5
0. 28	25. 20	0. 46	·0957	6. 15	·03021	3. 0	66·0	67·0
0. 44	24. 15	2. 3	·0958	8. 0	{ ·03062	9. 0	67·8	67·9
2. 5	24. 0	4. 7	·0948		·03444	21. 0	61·6	62·0
4. 12	18. 10	4. 42	·0969	10. 27	·03400			
4. 22	21. 30	4. 57	·0966	14. 0	·03580			
4. 39	18. 5	5. 15	·0975	20. 21	·04022			
6. 14	14. 30		***	21. 10	{ ·03992			
7. 9	15. 0	6. 6	·0956		·03738			
7. 36	13. 20		***	23. 59	·03690			
8. 7	15. 10	7. 2	·0964					
8. 39	15. 0	7. 16	·0961					
9. 3	16. 10	7. 43	·0964					
15. 41	13. 40	7. 58	·0964					
16. 29	11. 50	8. 17	·0958					
17. 0	12. 55	8. 40	·0961					
18. 6	11. 30		***					
18. 14	10. 15	10. 15	·0955					
19. 8	10. 40		***					
19. 28	9. 0	16. 53	·0960					
20. 51	11. 0		***					
20. 55	9. 30	18. 54	·0957					
21. 10	12. 0		***					
22. 45	16. 45	20. 5	·0939					
23. 59	22. 50		***					
		22. 46	·0930					
			***					
		23. 59	·0944					
Aug. 15		Aug. 15		Aug. 15		Aug. 15		
0. 0	21. 22. 50	0. 0	·0944	0. 0	·03690	0. 0	63·0	63·6
0. 45	24. 40		***	7. 37	·03207	1. 0	63·8	64·0
1. 38	24. 10	1. 30	·0945	11. 52	·03130	3. 0	65·3	65·3
1. 56	25. 30	1. 51	·0962	16. 30	·03211	6. 0	66·5	67·0
2. 26	23. 15	2. 17	·0950	21. 39	·03403	9. 0	66·0	67·0
2. 45	23. 40	3. 0	·0967	23. 59	·03330	12. 0	65·5	66·0
3. 15	20. 45	3. 15	·0957			18. 0	64·0	64·7
3. 47	19. 30		***			21. 0	64·7	65·2
4. 44	14. 40	3. 45	·0963					
6. 48	13. 0		***					
11. 0	15. 30	5. 36	·0951					
11. 36	14. 30	5. 46	·0956					
15. 40	16. 50	6. 15	·0949					
16. 21	14. 0		***					
16. 39	14. 50	12. 7	·0964					
	***		***					
19. 13	8. 0	18. 40	·0954					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 15		Aug. 15						
h m	° ′ ″	h m		h m		h m	°	°
19. 28	21. 10. 20	21. 28;	·0929					
20. 6	9. 55		***					
22. 13	18. 0	23. 59	·0933					
22. 21	17. 50							
23. 59	23. 35							
Aug. 16		Aug. 16		Aug. 16		Aug. 16		
0. 0	21. 23. 35	0. 0	·0933	0. 0	·03330	0. 0	67·0	68·0
1. 0	25. 30		***	2. 15	·03222	1. 0	67·8	68·3
1. 34	24. 40	1. 27	·0946		***	3. 0	68·2	68·5
1. 44	25. 55		***	6. 9	·03230	9. 0	67·0	67·0
2. 12	23. 30	2. 3	·0975	6. 15	·03266	21. 0	59·8	60·0
2. 29	27. 30	2. 13	·0964	7. 15	·03267			
2. 48	22. 0	2. 20	·0970	7. 31	·03295			
2. 57	22. 30	2. 47	·0986	7. 59	·03226			
3. 3	21. 30	3. 4	·1001	8. 13	·03067			
3. 26	24. 10	3. 7	·0993	8. 30	{ ·03110			
3. 44	15. 30	3. 18	·1025		·03393			
	***	3. 30	·1016	11. 56	·03437			
4. 2	16. 0	3. 35	·1026	12. 33	·03420			
4. 12	11. 50	3. 46	·0988	12. 57	·03444			
4. 28	17. 15		***	13. 14	·03400			
4. 44	11. 50	4. 5	·1009	19. 22	·04002			
5. 2	15. 50	4. 13	·1034	21. 12	{ ·03910			
5. 13	15. 45	4. 40	·0979		·03637			
5. 21	19. 30	5. 5	·1031	22. 37	{ ·03622			
5. 41	13. 20		***		·03518			
6. 0	23. 10	5. 20	·1025	23. 59	·03530			
6. 21	14. 20	5. 33	·1008					
6. 39	18. 45		***					
7. 15	17. 30	5. 56	·1010					
7. 45	7. 0	6. 7	·0980					
8. 0	9. 30	6. 26	·0993					
8. 12	33. 20	6. 52	·0969					
8. 28	21. 30	7. 7	·0980					
8. 50	12. 30	7. 18	·0967					
9. 13	11. 20		***					
9. 40	15. 30	7. 52	·0956					
	***	8. 0	·0984					
10. 15	16. 0	8. 7	·0918					
10. 23	17. 30	8. 26	·0935					
10. 48	15. 50	8. 35	·0920					
11. 12	17. 30	9. 32	·0945					
11. 28	16. 20	9. 45	·0936					
12. 0	22. 40		***					
12. 30	22. 0	11. 12	·0936					
12. 43	19. 30	11. 46	·0941					
12. 54	21. 0	12. 6	·0936					
13. 12	15. 40	12. 20	·0940					
13. 20	19. 45	12. 36	·0931					
13. 43	17. 20	12. 53	·0950					
13. 58	17. 30	13. 6	·0934					
15. 20	11. 30	13. 20	·0927					
17. 21	12. 0	14. 0	·0948					
17. 40	11. 0	14. 16	·0944					
19. 21	9. 30		***					
19. 36	8. 20	15. 40	·0950					
23. 59	26. 5		***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Aug.16						
h m	° ′ ″	h m		h m		h m	°	°
		17. 30	·0948					
			***					
		19. 51	·0929					
			***					
		21. 35	·0925					
			***					
		23. 59	·0937					
Aug.17		Aug.17		Aug.17		Aug.17		
0. 0	21. 26. 5	0. 0	·0937	0. 0	·03530	1. 0	61·9	61·7
1. 50	25. 0	2. 6	·0948	6. 53	·02947	3. 0	62·0	63·0
1. 56	25. 50	2. 20	·0942	7. 38	·02910	9. 0	63·6	63·9
4. 28	14. 30		***		·02953	21. 0	57·3	58·2
6. 17	12. 40	4. 43	·0942	11. 11	·03016			
7. 0	13. 35		***	19. 49	·03547			
7. 42	12. 30	6. 26	·0949	22. 37	·03600			
9. 30	13. 30	6. 50	·0959		·03512			
19. 16	12. 0	7. 17	·0950	23. 59	·03523			
20. 28	13. 10		***					
23. 39	24. 45	16. 18	·0964					
23. 59	24. 30	18. 56	·0951					
			***					
		22. 56	·0942					
		23. 59	·0951					
Aug.18		Aug.18		Aug.18		Aug.18		
0. 0	21. 24. 30	0. 0	·0951	0. 0	·03523	1. 0	58·0	58·2
0. 12	23. 55	0. 36	·0955	0. 10	·03530	3. 0	59·0	58·8
0. 42	23. 50	1. 20	·0970		·03367	9. 0	61·0	61·3
1. 17	24. 55		***	5. 13:	·03453	22. 27	61·0	61·2
3. 39	18. 45	2. 13	·0969	12. 12	·03175			
3. 45	19. 0		***	15. 7	·03160			
4. 51	16. 0	3. 2	·0974	20. 15	·03295			
5. 30	15. 30	3. 16	·0968	23. 59	·03164			
7. 13	16. 10	3. 19	·0974					
7. 58	15. 45	3. 28	·0964					
8. 12	14. 30		***					
9. 28	13. 40	3. 40	·0969					
9. 39	12. 0	3. 47	·0978					
10. 0	12. 30		***					
10. 45	7. 45	4. 46	·0969					
11. 27	8. 30	5. 7	·0981					
11. 48	16. 40	5. 15	·0974					
12. 28	7. 55	5. 17	·0982					
12. 38	8. 20		***					
12. 45	7. 30	5. 56	·0972					
13. 17	10. 15	6. 10	·0986					
13. 28	9. 0	6. 20	·0978					
13. 50	11. 0	6. 26	·0982					
13. 58	8. 0	6. 33	·0974					
14. 13	7. 30		***					
14. 38	11. 40	6. 47	·0982					
14. 42	10. 45		***					
14. 51	11. 0	7. 20	·0974					
15. 14	7. 45		***					
15. 28	9. 20	7. 50	·0977					
15. 50	9. 40	8. 4	·0991					
16. 15	7. 40		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug.18		Aug.18						
h m	° ′ ″	h m		h m		h m	°	°
16. 43	21. 11. 50	8. 33	·0988					
17. 5	10. 45	8. 50	·0974					
17. 44	20. 20	9. 4	·0978					
17. 56	19. 0	9. 8	·0970					
18. 7	20. 10	9. 33	·0989					
18. 45	16. 5	9. 36	·0970					
18. 52	17. 0	9. 45	·0974					
19. 14	13. 20		***					
19. 21	14. 50	10. 46	·0956					
19. 30	15. 15	10. 53	·0959					
19. 40	13. 50		***					
20. 14	21. 20	11. 21	·0958					
	***	11. 36	·0949					
21. 28	16. 30	12. 5	·0977					
21. 58	20. 45		***					
22. 30	21. 30	12. 56	·0979					
22. 54	24. 45	13. 28	·0961					
23. 59	25. 20	14. 4:	·0968					
		14. 26	·0961					
		14. 45	·0969					
		15. 6	·0969					
		15. 14	·0963					
		15. 33	·0977					
		15. 45	·0969					
		15. 50	·0972					
		16. 15	·0962					
		16. 40:	·0975					
		17. 3	·0961					
			***					
		17. 36	·0958					
			***					
		18. 15	·0967					
		18. 30	·0956					
		18. 49	·0946					
		19. 15	·0946					
		19. 36	·0933					
		19. 45	·0937					
		19. 50	·0931					
		20. 15	·0946					
			***					
		20. 40	·0945					
			***					
		21. 7	·0933					
		21. 17	·0937					
			***					
		23. 0	·0917					
			***					
		23. 50	·0933					
		23. 59	·0929					
Aug.19		Aug.19		Aug.19		Aug.19		
0. 0	21. 25. 20	0. 0	·0929	0. 0	·03164	8. 35	65·3	65·6
0. 59	25. 50		***	4. 39	·03044	21. 0	64·0	65·0
1. 28	24. 30	0. 53	·0942	6. 56	·02845			
2. 18	25. 30		***	8. 40	·02830			
2. 57	24. 30	1. 26	·0934		·02912			
3. 26	22. 30		***	12. 2	·02822			
3. 40	23. 20	3. 4	·0955	21. 4	·02956			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 19		Aug. 19		Aug. 19				
h m	° ′ ″	h m		h m		h m	°	°
4. 41	21. 16. 30	3. 20	·0950	23. 59	·02860			
4. 51	17. 45	3. 42	·0959					
5. 10	12. 20	4. 0	·0957					
5. 29	15. 20	4. 26	·0963					
6. 10	17. 20	4. 40	·0975					
6. 58	17. 30	4. 53	·0940					
7. 17	16. 20	5. 5	·0946					
7. 27	17. 0	5. 17	·0945					
8. 22	14. 30	5. 48	·0956					
9. 2	7. 45		***					
9. 30	12. 20	6. 59	·0965					
11. 13	15. 50		***					
11. 27	17. 45	8. 5	·0969					
11. 42	15. 20	8. 42:	·0954					
12. 4	14. 40	9. 4	·0962					
12. 29	17. 40		***					
12. 52	15. 30	9. 53	·0956					
16. 37	12. 50		***					
18. 45	9. 20	10. 20	·0958					
19. 30	9. 15	10. 26	·0962					
21. 20	13. 55	10. 45	·0955					
21. 34	13. 20	10. 52	·0959					
23. 59	23. 35	11. 26	·0961					
		11. 45	·0956					
			***					
		12. 53	·0959					
		17. 32	·0952					
			***					
		21. 45	·0916					
		22. 46	·0913					
		23. 50	·0927					
		23. 59	·0935					
Aug. 20		Aug. 20		Aug. 20		Aug. 20		
0. 0	21. 23. 40	0. 0	·0935	0. 0	·02860	1. 0	65·0	65·7
0. 35	27. 0	0. 25	·0939	5. 15	·03248	3. 0	65·8	66·7
0. 43	26. 15	0. 45	·0925	8. 37	·03370	9. 0	66·4	67·0
1. 16	26. 10	1. 5	·0933	12. 41	·03356	21. 0	61·7	62·3
2. 15	23. 25	1. 36	·0928	20. 14	·03762			
2. 26	24. 0	2. 20	·0949	21. 16	·03760			
2. 50	21. 30	2. 48	·0935	23. 59	·03890			
3. 12	22. 0	3. 10	·0961					
3. 37	19. 0	3. 34	·0945					
3. 57	17. 45	3. 47	·0938					
4. 28	17. 10	4. 15	·0949					
5. 29	12. 45	4. 33	·0945					
8. 32	12. 40	4. 50	·0946					
9. 37	14. 20	5. 17	·0962					
9. 54	13. 30		***					
10. 42	14. 0	6. 46	·0955					
11. 45	11. 50	7. 0	·0960					
12. 13	17. 45	7. 11	·0957					
12. 52	13. 45		***					
13. 12	13. 10	8. 21	·0957					
14. 10	12. 50	8. 37	·0952					
14. 21	13. 20		***					
14. 41	12. 50	11. 0	·0953					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 20		Aug. 20						
h m	° ′ ″	h m		h m		h m	°	°
15. 14	21. 18. 0	11. 15	·0961					
15. 52	15. 30		***					
16. 43	12. 45	11. 42	·0956					
17. 35	13. 50	12. 4	·0966					
18. 15	13. 0	12. 17	·0958					
18. 55	9. 5	12. 50	·0961					
19. 5	9. 20		***					
19. 25	8. 25	15. 7	·0950					
20. 0	8. 55	16. 50	·0963					
20. 12	10. 0	17. 42:	·0952					
20. 22	9. 55	18. 35	·0956					
21. 28	14. 0	21. 53	·0922					
23. 35	23. 0	23. 59	·0935					
23. 59	23. 30							
Aug. 21		Aug. 21		Aug. 21		Aug. 21		
0. 0	21. 23. 30	0. 0	·0935	0. 0	·03890	1. 0	63·0	63·7
1. 2	25. 10	2. 48	·0952	1. 46	·03896	3. 0	64·7	65·8
2. 11	23. 55		***	7. 0	{ ·03410	9. 8	66·0	67·0
4. 46	15. 15	3. 27	·0963		·03460	21. 0	60·8	61·3
6. 20	12. 40	3. 38	·0960	11. 20	·03472			
7. 11	13. 45	3. 52	·0965	11. 39	·03410			
7. 40	13. 30	4. 30	·0960	12. 46	·03433			
8. 18	14. 55		***	23. 59	·04192			
9. 11	12. 50	5. 40	·0965					
9. 28	13. 45	6. 7	·0956					
9. 58	12. 0	7. 0	·0960					
10. 19	13. 30	7. 6	·0969					
10. 40	12. 30		***					
10. 48	13. 0	9. 40	·0953					
11. 11	11. 20	10. 17	·0969					
11. 26	16. 30	10. 45	·0956					
11. 35	14. 20		***					
12. 4	17. 25	11. 21	·0960					
12. 16	14. 0	11. 40	·0979					
12. 40	13. 30	12. 1	·0958					
13. 16	5. 45	12. 6	·0941					
13. 40	7. 50	12. 36	·0970					
13. 58	7. 20	13. 7	·0954					
14. 51	12. 40	13. 30	·0958					
15. 44	9. 55		***					
16. 14	10. 45	14. 32:	·0950					
16. 44	13. 20		***					
18. 3	5. 20	15. 30	·0956					
18. 16	10. 30	15. 46	·0952					
18. 51	4. 45	16. 20	·0960					
	***		***					
19. 10	6. 45	17. 45	·0958					
19. 13	5. 30		***					
19. 16	7. 10	18. 17	·0967					
19. 54	6. 15		***					
20. 25	8. 55	18. 42	·0955					
20. 50	6. 30		***					
23. 42	27. 0	19. 42	·0949					
23. 48	26. 0		***					
23. 55	27. 30	20. 20	·0951					
23. 59	27. 15		***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Aug.21						
h m	° ′ ″	h m		h m		h m	°	°
		22. 17	·0920					
			***					
		23. 59	·0948					
Aug.22		Aug.22		Aug.22		Aug.22		
0. 0	21. 27. 15	0. 0	·0948	0. 0	·04192	0. 0	61 ·3	61 ·2
0. 15	28. 45	0. 45	·0946	0. 37	·04233	1. 0	61 ·8	61 ·2
1. 36	29. 20	0. 58	·0955	1. 26	·04210	3. 0	62 ·7	62 ·9
1. 50	32. 0	1. 30	·0953		·04138	6. 0	63 ·2	63 ·4
3. 10	24. 45	1. 48	·0975	2. 56	·04135	9. 0	63 ·9	64 ·1
3. 15	25. 0	2. 11	·0962		·03974	12. 0	62 ·3	62 ·9
4. 30	20. 0		***	5. 30	·03940	18. 0	57 ·1	57 ·7
6. 58	16. 30	2. 56	·0950	11. 16:	·03692	21. 0	57 ·0	57 ·6
9. 20	15. 0	3. 22	·0960	19. 55	·04112			
9. 40	13. 30	3. 45	·0978	21. 33	·04010			
12. 10	15. 0	4. 15	·0969		·03718			
	***	4. 40	·0965	23. 59	·03714			
14. 45	14. 15		***					
15. 10	18. 35	7. 36	·0968					
15. 14	17. 45	7. 47	·0962					
15. 22	18. 40		***					
15. 40	18. 45	9. 26	·0955					
16. 21	14. 5	9. 47	·0961					
16. 54	12. 40		***					
17. 5	13. 15	10. 46	·0956					
17. 39	9. 45		***					
17. 54	11. 40	13. 42	·0961					
18. 10	9. 30	13. 56	·0967					
18. 41	9. 25		***					
19. 12	12. 30	14. 45	·0960					
19. 43	10. 45		***					
	***	15. 37	·0961					
21. 45	17. 55	16. 8	·0970					
	***	16. 40	·0963					
23. 59	21. 0	17. 2	·0967					
		17. 15	·0962					
		17. 33	·0966					
		21. 0	·0936					
			***					
		22. 20	·0931					
			***					
		23. 59	·0943					
Aug.23		Aug.23		Aug.23		Aug.23		
0. 0	21. 21. 0	0. 0	·0943	0. 0	·03714	0. 0	59 ·0	59 ·7
0. 27	20. 45	0. 18	·0946	7. 5	·03152	1. 0	60 ·0	60 ·4
0. 47	24. 10	0. 45	·0958	11. 40	·03120	3. 0	62 ·7	62 ·9
1. 10	22. 55	1. 0	·0945	12. 24	·03084	9. 0	64 ·0	64 ·0
1. 20	24. 45	1. 17	·0956	14. 12	·03120	21. 0	58 ·2	58 ·6
1. 55	24. 30		***	20. 0:	·03542			
2. 28	21. 45	1. 45	·0956	23. 59	·03684			
2. 41	20. 5	2. 2	·0942					
3. 9	20. 0	2. 20	·0946					
4. 7	16. 50	2. 32	·0941					
4. 42	17. 5		***					
5. 13	15. 0	3. 22	·0959					
5. 55	15. 0	3. 42:	·0955					
6. 39	13. 30	4. 36	·0971					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.23		Aug.23						
h m	° ′ ″	h m		h m		h m	°	°
7. 0	21. 14. 30	5. 17	·0962					
7. 32	5. 55	5. 28	·0971					
8. 15	10. 50	5. 40	·0982					
8. 40	15. 0	6. 15	·0970					
10. 51	13. 55		***					
11. 14	11. 15	6. 46	·0964					
11. 25	12. 10	7. 15	·0950					
11. 39	10. 30	7. 35	·0968					
11. 45	14. 30		***					
12. 12	4. 30	8. 40	·0961					
12. 14	5. 20	11. 17	·0956					
12. 54	3. 30	11. 30	·0957					
13. 40	13. 30	11. 45	·0972					
	***	12. 3	·0966					
14. 43	7. 30	12. 30	·0976					
	***		***					
16. 22	13. 0	13. 40	·0948					
16. 56	11. 30	14. 10	·0969					
17. 11	12. 30		***					
17. 45	11. 5	15. 53	·0954					
17. 56	11. 30		***					
18. 21	9. 0	17. 10	·0961					
18. 44	10. 40		***					
19. 58	10. 50	21. 16	·0927					
20. 13	12. 20		***					
20. 40	10. 0	22. 5	·0929					
20. 58	11. 30	22. 27:	·0930					
21. 25	15. 0		***					
21. 54	16. 10	23. 40	·0944					
22. 10	17. 40	23. 59	·0954					
22. 15	17. 20							
23. 41	21. 30							
23. 55	24. 0							
23. 59	23. 30							
Aug.24		Aug.24		Aug.24		Aug.24		
0. 0	21. 23. 25	0. 0	·0954	0. 0	·03684	1. 0	60 ·0	60 ·7
0. 12	22. 30	0. 26	·0943	5. 46	·03637	3. 0	61 ·7	61 ·9
1. 43	22. 10		***	8. 11	·03460	9. 0	64 ·0	65 ·0
1. 52	21. 20	1. 35	·0958	12. 55	·03277	21. 0	63 ·0	64 ·0
2. 13	22. 0	1. 48	·0953	19. 15	·03372			
3. 0	21. 0	2. 10	·0962	23. 27	·03820			
3. 42	18. 20		***		(†)			
5. 7	16. 25	2. 25	·0955					
5. 29	13. 20		***					
5. 45	6. 40	3. 4	·0964					
6. 12	11. 40	3. 30	·0975					
6. 42	9. 0	4. 10	·0978					
7. 13	11. 10		***					
7. 39	10. 45	4. 40	·0977					
8. 13	12. 20		***					
8. 25	10. 50	5. 16	·0984					
8. 39	13. 40	5. 26	·0983					
9. 1	12. 0	5. 34	·0984					
9. 12	13. 35	5. 40	·1009					
9. 24	13. 0	6. 25	·0967					
9. 31	11. 0		***					
9. 44	10. 40	7. 18	·0971					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug.24		Aug.24						
h m	° ′ ″	h m		h m		h m	°	°
10. 7	21. 16. 5	8. 7	·0965					
10. 30	10. 40	8. 16	·0960					
10. 44	12. 50	8. 20	·0965					
10. 51	12. 20	8. 45	·0953					
11. 7	12. 50	9. 12	·0955					
12. 8	10. 40	9. 36	·0950					
12. 17	13. 45	10. 3	·0967					
12. 27	13. 30	10. 17	·0959					
12. 53	16. 30	10. 33	·0967					
13. 52	12. 0	10. 47	·0956					
16. 37	10. 0	10. 56	·0962					
16. 54	11. 30		***					
17. 58	10. 20	11. 40	·0966					
18. 11	9. 0	12. 7	·0964					
18. 18	10. 20	12. 26	·0946					
18. 29	10. 0	12. 45	·0973					
18. 38	10. 20		***					
18. 52	8. 40	13. 20	·0959					
19. 12	11. 40		***					
19. 18	10. 35	13. 52	·0959					
19. 40	10. 40	14. 3	·0963					
19. 45	9. 40	14. 17	·0958					
20. 6	12. 20		***					
20. 20	12. 35	14. 46	·0954					
20. 29	13. 55	14. 52	·0959					
20. 45	13. 30	15. 0	·0955					
22. 6	19. 0		***					
23. 59	24. 30	16. 11	·0954					
			***					
		22. 5	·0924					
			***					
		23. 59	·0936					
Aug.25		Aug.25		Aug.25		Aug.25		
0. 0	21. 24. 30	0. 0	·0936		(†)	1. 0	64·0	64·7
0. 52	24. 30		***	0. 33	·03530	3. 0	64·7	65·4
1. 51	23. 55	0. 45	·0943	2. 9	{ ·03522	9. 0	64·5	65·2
2. 17	21. 20		***		·03868	21. 8	62·0	62·2
2. 33	21. 20	1. 45	·0950	9. 43	·03785			
3. 37	18. 20	2. 4	·0949	15. 55	·03909			
4. 22	17. 0		***	17. 56	·03890			
4. 45	15. 15	2. 46	·0959	22. 30	·04055			
5. 20	15. 40		***	23. 59	·04023			
5. 39	14. 40	3. 22	·0956					
6. 54	15. 35		***					
8. 15	14. 15	4. 30	·0964					
8. 39	14. 45	4. 44	·0959					
9. 11	13. 20	5. 7	·0958					
9. 40	14. 30	5. 24	·0962					
11. 24	14. 0	5. 40	·0954					
12. 43	11. 45	5. 50	·0959					
13. 43	11. 20	6. 15	·0957					
14. 0	12. 30	6. 47:	·0962					
14. 22	12. 35	7. 13:	·0960					
14. 52	10. 0	7. 37	·0965					
15. 13	9. 30	8. 45	·0956					
15. 40	10. 50	9. 25	·0959					
15. 55	13. 40		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug.25		Aug.25						
h m	° ′ ″	h m		h m		h m	°	°
17. 40	21. 9. 55	10. 17	·0955					
17. 56	11. 30		***					
	***	12. 24	·0960					
18. 45	10. 0	12. 37	·0955					
19. 12	11. 20	13. 10	·0961					
19. 32	9. 40		***					
20. 47	11. 20	13. 42	·0956					
21. 44	16. 15	14. 40	·0960					
21. 55	16. 0	15. 27	·0955					
	(†)	15. 49	·0962					
			***					
		16. 58	·0954					
			***					
		22. 3	·0921					
			***					
		22. 36	·0930					
		22. 45	·0924					
			***					
		23. 18	·0937					
		23. 30	·0934					
		23. 46	·0943					
		23. 59	·0939					
Aug.26		Aug.26		Aug.26		Aug.26		
	(†)	0. 0	·0937	0. 0	·04023	8. 37	66·3	66·6
2. 15	21. 18. 40	0. 18	·0934	1. 39	·03930	21. 0	60·3	61·2
3. 20	16. 5		***	2. 52	·03722			
3. 30	16. 15	1. 20	·0941	6. 18	{ ·03760			
4. 17	12. 20		***		·04137			
5. 30	10. 0	3. 6	·0935	9. 21	·04070			
7. 29	10. 40	3. 17	·0940	14. 43	·04274			
8. 37	12. 38*	3. 40	·0932	23. 59	·04184			
10. 25	12. 30	4. 4	·0934					
11. 24	7. 50	4. 12	·0941					
12. 15	10. 20	4. 17	·0935					
12. 24	12. 0		***					
12. 45	11. 10	9. 46	·0956					
13. 43	15. 0	10. 7	·0950					
14. 28	11. 30		***					
15. 18	11. 35	11. 10	·0956					
15. 25	12. 25		***					
15. 54	9. 40	12. 4	·0950					
17. 3	10. 0		***					
	***	13. 14	·0955					
18. 45	8. 15	13. 47	·0962					
18. 54	7. 20		***					
19. 13	10. 5	14. 20	·0956					
19. 30	9. 0	15. 6	·0955					
19. 57	11. 30	15. 17	·0960					
20. 30	9. 40	15. 28	·0957					
21. 20	12. 15	18. 45	·0953					
21. 56	15. 20	19. 30	·0948					
23. 5	19. 50	19. 40	·0942					
	(†)	19. 53	·0947					
		20. 12	·0942					
		20. 39	·0944					
		20. 56	·0939					
			***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

DECLINATION.—August 26. The times throughout this day are approximate only.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Aug.26						
h m	° ′ ″	h m		h m		h m	°	°
		21. 37	·0942					
		21. 45	·0934					
		22. 27	·0941					
		22. 50	·0938					
		23. 36	·0948					
		23. 59	·0942					
Aug.27		Aug.27		Aug.27		Aug.27		
	(†)	0. 0	·0942	0. 0	·04184	1. 0	63·0	63·6
0. 30	21. 24. 20	0. 30	·0945	4. 45	·03550	3. 0	64·7	65·4
0. 55	23. 40	0. 48	·0942	8. 36	·03624	9. 0	65·4	65·8
1. 10	25. 0	1. 20	·0951	11. 39:	·03650	21. 0	59·8	60·3
1. 52	26. 10	1. 47	·0945	19. 0	·04291			
2. 33	19. 30	2. 15	·0946	21. 17	·04250 ·04187			
2. 52	19. 50	2. 40	·0942					
4. 53	11. 35	3. 6	·0948	23. 59	·04078			
6. 25	10. 40		***					
7. 13	11. 0	3. 40	·0941					
	(†)	3. 51	·0943					
9. 0	13. 45	3. 55	·0941					
11. 15	12. 10	4. 20	·0948					
12. 45	12. 50	4. 47	·0942					
14. 50	9. 50	5. 46	·0953					
16. 45	10. 20		***					
18. 51	8. 20	6. 35	·0951					
19. 52	9. 30		***					
22. 30	18. 45	7. 10	·0959					
23. 13	22. 0	7. 45	·0950					
23. 59	23. 50		***					
		13. 36	·0959					
		13. 45	·0956					
		14. 33	·0965					
		16. 47	·0957					
		18. 40	·0956					
		21. 46	·0928					
		22. 35	·0923					
		23. 59	·0930					
Aug.28		Aug.28		Aug.28		Aug.28		
0. 0	21. 23. 50	0. 0	·0930	0. 0	·04078	1. 0	63·5	63·2
1. 1	24. 40		***	6. 43	·03600	3. 0	64·0	64·6
3. 52	14. 30	1. 25	·0947	9. 57	·03571	9. 0	63·9	64·0
4. 0	19. 0	2. 27	·0954	13. 0	·03630	21. 0	62·3	62·7
4. 20	13. 20	3. 15	·0944	17. 29:	·04071			
4. 55	10. 15		***	21. 25	·04144			
6. 11	9. 30	4. 5	·0962	23. 43	·04033			
	***	4. 42	·0966		(†)			
7. 33	10. 40	5. 15	·0960					
8. 7	12. 30		***					
	***	5. 46	·0959					
15. 21	13. 40		***					
18. 12	8. 0	6. 5	·0954					
19. 14	8. 30		***					
19. 56	7. 45	7. 33	·0958					
23. 59	23. 10	8. 37	·0966					
		9. 16	·0961					
		9. 57	·0964					
		10. 8	·0962					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Aug.28						
h m	° ′ ″	h m		h m		h m	°	°
		10. 25	·0967					
			***					
		12. 6	·0960					
			***					
		15. 45	·0969					
			***					
		21. 36	·0945					
			***					
		23. 59	·0948					
Aug.29		Aug.29		Aug.29		Aug.29		
0. 0	21. 23. 10	0. 0	·0948		(†)	0. 0	64·0	65·0
0. 45	22. 40	0. 57	·0957	0. 36	·04035	1. 0	64·7	65·5
0. 58	23. 55	1. 37	·0952	1. 30	·03957	3. 0	66·7	67·3
2. 30	19. 45		***	3. 12	·03540	6. 0	66·4	67·3
3. 52	14. 30	2. 20	·0957	5. 46	·03650 ·03958	9. 0	65·0	66·5
5. 0	10. 40		***			12. 0	63·8	65·0
7. 17	11. 10	4. 18	·0936	9. 51	·03994	18. 0	61·8	62·2
9. 15	13. 40	4. 46	·0944	13. 4	·04093	21. 0	62·7	63·0
10. 15	13. 20	5. 45	·0937	16. 28	·04358			
11. 11	14. 15	6. 50	·0942	19. 54	·04300			
11. 41	13. 0		***	22. 31	·04193 ·04089			
12. 43	11. 45	10. 15	·0951					
12. 56	14. 0	11. 40	·0960	23. 59	·04061			
13. 27	8. 0	12. 46	·0958					
14. 2	11. 20	13. 0	·0984					
	***	13. 26	·0968					
17. 21	6. 40		***					
17. 44	10. 0	16. 25	·0972					
18. 40	7. 10	16. 45	·0967					
19. 0	8. 30	16. 58	·0970					
19. 21	8. 20	17. 21	·0959					
19. 39	10. 0	18. 0	·0966					
21. 25	14. 0		***					
22. 27	19. 0	21. 45	·0931					
23. 14	21. 30		***					
23. 50	26. 10	22. 51	·0930					
23. 59	26. 0	23. 15	·0936					
		23. 26	·0935					
		23. 50	·0944					
		23. 59	·0942					
Aug.30		Aug.30		Aug.30		Aug.30		
0. 0	21. 26. 0	0. 0	·0942	0. 0	·04061	0. 0	64·0	64·4
0. 59	27. 35	1. 10	·0940	0. 54	·04060	1. 0	65·0	65·0
1. 56	24. 20	1. 18	·0934	1. 40	·04012	3. 0	66·5	67·7
2. 5	25. 30	1. 36	·0940	4. 11	·03590	9. 0	64·0	65·0
2. 21	25. 10	1. 40	·0935	4. 55	·03574 ·03737	21. 0	59·0	60·0
2. 28	26. 40	1. 53	·0943					
3. 17	14. 10	2. 0	·0941	5. 39	·03700 ·03928			
3. 36	14. 20	2. 15	·0955					
3. 44	16. 30	2. 26	·0952	8. 35	·03820			
3. 48	15. 30	2. 33	·0950	10. 30	·03880			
3. 56	17. 0	2. 47	·0945	11. 28	·03774			
4. 10	15. 0	2. 50	·0949	11. 47	·03850			
4. 45	13. 0	3. 7	·0926	16. 2	·04262			
5. 9	13. 20	3. 16	·0920	17. 46	·04259			
5. 20	12. 0		***	23. 59	·04117			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug.30		Aug.30						
h m	° ′ ″	h m		h m		h m	°	°
5. 32	21. 12. 0	3. 40	·0925					
5. 45	13. 30	4. 6	·0957					
5. 59	12. 0		***					
	***	4. 46	·0924					
7. 0	10. 0	5. 15	·0942					
	***		***					
9. 47	14. 5	5. 39	·0938					
9. 58	21. 14. 0	5. 50	·0954					
10. 41	20. 52. 30		***					
10. 55	21. 6. 45	6. 7	·0942					
11. 9	2. 40	6. 13	·0946					
11. 22	19. 30	6. 26	·0942					
11. 44	6. 30	6. 37	·0948					
12. 24	11. 15	6. 50	·0945					
13. 21	11. 30		***					
13. 44	9. 15	9. 40	·0954					
14. 18	10. 20	9. 46	·0973					
14. 42	13. 30	9. 50	·0966					
14. 59	11. 0	10. 0	·0971					
15. 51	8. 50	10. 13	·0958					
17. 15	9. 0	10. 40	·1034					
	***	10. 45	·1018					
18. 56	5. 40	10. 52	·1024					
20. 29	6. 5	11. 5	·1011					
20. 39	8. 10	11. 10	·1009					
20. 51	7. 30	11. 16	·1001					
23. 40	24. 50	11. 20	·1007					
23. 59	24. 30	11. 33	·0928					
		11. 50	·0943					
		12. 10	·0928					
			***					
		14. 5	·0947					
		14. 10	·0943					
		14. 46	·0958					
		14. 50	·0952					
		15. 7	·0958					
			***					
		17. 46	·0955					
			***					
		20. 17	·0934					
		20. 30	·0938					
		20. 46	·0931					
		21. 4	·0935					
		21. 16	·0931					
			***					
		23. 20	·0951					
		23. 26	·0946					
		23. 37	·0954					
		23. 59	·0950					
Aug.31		Aug.31		Aug.31		Aug.31		
0. 0	21. 24. 30	0. 0	·0950	0. 0	·04117	1. 0	61 ·7	61 ·8
2. 7	22. 10	2. 0	·0945	1. 30	·04050	3. 0	64 ·0	65 ·0
2. 42	23. 0	2. 30	·0957	5. 41	·03471	9. 0	64 ·7	66 ·4
5. 59	13. 0	2. 51	·0958	8. 10	·03500	21. 0	57 ·8	58 ·7
6. 58	11. 30	3. 40	·0942	11. 51	·03487			
7. 43	13. 10	3. 50	·0945	21. 44	·04288			
9. 37	13. 15	4. 17	·0936	23. 59	·04218			
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug.31		Aug.31						
h m	° ′ ″	h m		h m		h m	°	°
10. 0	21. 8. 0	6. 15	·0950					
10. 27	11. 30	6. 42	·0943					
10. 51	12. 20	7. 45	·0950					
11. 0	10. 30	8. 15	·0949					
11. 12	11. 10	8. 40	·0955					
11. 29	9. 20		***					
11. 54	9. 20	9. 26	·0952					
12. 15	6. 30	9. 45	·0955					
12. 29	7. 30	10. 4	·0981					
12. 43	7. 0	10. 46	·0965					
13. 40	12. 30	10. 56	·0967					
14. 43	13. 20	11. 13	·0960					
	***	11. 43	·0968					
19. 43	9. 25	12. 6	·0955					
20. 32	11. 10	12. 17	·0953					
23. 45	24. 0	12. 44	·0943					
23. 59	24. 30	13. 58	·0954					
			***					
		16. 37	·0958					
			***					
		18. 46	·0952					
		21. 6	·0933					
		21. 34	·0935					
		21. 52	·0929					
		23. 59	·0933					
Sept. 1		Sept. 1		Sept. 1		Sept. 1		
0. 0	21. 24. 30	0. 0	·0933	0. 0	·04218	1. 0	62 ·6	63 ·0
0. 12	24. 50	0. 25	·0942	0. 29	{ ·04200 ·04244	3. 0	64 ·0	65 ·7
0. 22	26. 30	0. 46	·0938			9. 0	65 ·4	66 ·0
2. 27	21. 0	1. 5	·0945	5. 5	{ ·03565 ·03660	21. 30	58 ·2	58 ·6
	***		***					
4. 59	10. 15	2. 30	·0952	6. 13	{ ·03544 ·03708			
6. 28	10. 10	2. 46	·0947					
6. 51	6. 30		***	7. 9	{ ·03617 ·03700			
7. 15	11. 0	3. 15	·0946					
7. 39	10. 0	3. 30	·0950	8. 23	{ ·03623 ·03675			
9. 7	12. 0	3. 37	·0946					
9. 52	9. 20		***	13. 7:	·03740			
10. 0	10. 30	3. 53	·0945	19. 28	·04312			
10. 51	5. 50	4. 15	·0952	23. 59	·04295			
11. 40	8. 50	4. 40	·0935					
12. 8	7. 15	4. 52	·0942					
	***		***					
13. 13	8. 10	5. 24	·0936					
13. 52	17. 30	6. 4	·0945					
14. 23	13. 30	6. 30	·0945					
15. 9	10. 30	6. 33	·0942					
15. 55	12. 10	6. 46	·0946					
	***	7. 0	·0953					
18. 0	6. 0	7. 6	·0945					
18. 29	8. 30	7. 20	·0942					
	***	8. 0	·0951					
19. 55	5. 30		***					
20. 52	6. 45	9. 0	·0949					
23. 15	22. 0	9. 20:	·0956					
23. 40	25. 30	9. 39	·0951					
23. 59	25. 45	10. 10	·0960					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Sept. 1						
h m	° ′ ″	h m		h m		h m	°	°
		10. 20	·0957					
		10. 33	·0959					
		10. 46	·0954					
		11. 6	·0959					
			***					
		13. 13	·0950					
			***					
		14. 40	·0958					
			***					
		15. 42	·0950					
			***					
		17. 20	·0957					
			***					
		22. 6	·0928					
		22. 17	·0934					
			***					
		23. 59	·0937					
Sept. 2		Sept. 2		Sept. 2		Sept. 2		
0. 0	21. 25. 45	0. 0	·0937	0. 0	·04295	8. 45	63·7	64·3
0. 37	24. 20	1. 37	·0955	1. 56	·04256	21. 0	58·0	58·5
0. 50	24. 0	1. 52	·0950	2. 30	·04274			
1. 27	25. 30	2. 20	·0979	8. 10:	·03717			
1. 41	24. 40	2. 36	·0981	12. 55	·03610			
1. 55	36. 10	2. 52	·0961	19. 28	·04028			
2. 52	23. 30	3. 15	·0958	21. 18	·04111			
3. 19	19. 30	3. 42	·0961	22. 29	·04188			
4. 39	14. 20	3. 50	·0957	23. 59	·04228			
5. 25	8. 45	4. 10	·0956					
5. 36	9. 30	4. 20	·0959					
6. 9	8. 0		***					
6. 29	9. 10	5. 6	·0948					
6. 40	8. 50	5. 33	·0961					
6. 59	10. 50	5. 37	·0957					
7. 21	10. 30	5. 46	·0957					
7. 42	11. 15	6. 3	·0952					
8. 55	10. 25	6. 8	·0955					
11. 38	12. 20	6. 42	·0948					
11. 51	15. 30		***					
13. 15	11. 0	7. 37	·0955					
13. 42	12. 0		***					
13. 54	10. 40	11. 3	·0956					
14. 19	10. 5	12. 16	·0968					
14. 56	13. 25	12. 50	·0967					
15. 21	11. 50	13. 11	·0960					
15. 55	14. 30	14. 16	·0962					
16. 43	10. 40	15. 3	·0958					
17. 0	11. 0	15. 17	·0960					
	***	15. 30	·0956					
18. 11	7. 55	16. 15	·0964					
18. 30	9. 10	17. 18	·0954					
19. 0	8. 10	18. 7	·0952					
19. 20	9. 20	18. 46	·0941					
19. 50	8. 0	19. 6	·0945					
21. 44	15. 25		***					
22. 46	21. 5	21. 30	·0929					
23. 59	24. 0		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Sept. 2						
h m	° ′ ″	h m		h m		h m	°	°
		22. 46	·0932					
		23. 59	·0936					
Sept. 3		Sept. 3		Sept. 3		Sept. 3		
0. 0	21. 24. 0		(†)	0. 0	·04228	1. 0	61·3	62·2
1. 37	23. 15	1. 0	·0941*	1. 40	·04186	3. 0	63·0	64·6
1. 57	20. 20	1. 46	·0943	4. 41	·03684	9. 0	64·0	64·9
3. 38	16. 0	2. 45	·0945	6. 17	·03537	21. 0	59·0	59·0
4. 27	11. 0	3. 40	·0955	13. 19:	·03580			
5. 50	9. 45	4. 20	·0942	21. 52	·04145			
6. 54	11. 45	4. 53	·0951	23. 37	·04213			
8. 58	12. 20		***		(†)			
9. 25	10. 50	5. 50	·0946					
10. 44	10. 45	8. 17	·0955					
11. 12	12. 15		***					
14. 51	13. 15	10. 46	·0954					
18. 52	8. 30	15. 6	·0960					
19. 15	7. 10	17. 30	·0954					
20. 26	7. 30	20. 33	·0938					
21. 48	11. 40	22. 36:	·0932					
23. 45	19. 20	23. 59	·0939					
23. 59	19. 0							
Sept. 4		Sept. 4		Sept. 4		Sept. 4		
0. 0	21. 19. 0	0. 0	·0939		(†)	1. 0	60·8	61·3
0. 41	20. 45	0. 47	·0950	0. 30	·01792*	3. 0	62·8	63·2
1. 34	20. 30	1. 33	·0949	2. 31	·01788	9. 0	64·0	64·7
1. 42	22. 35	1. 40	·0971	4. 28	·01828	21. 0	57·0	57·4
	***	2. 3	·0965	6. 22	·01974			
2. 17	20. 20		***	6. 49	·02066			
2. 28	21. 10	2. 26	·0971	7. 15	·02004			
2. 41	19. 30	3. 0:	·0966	10. 10	·01865			
3. 13	17. 20	3. 28	·0975	13. 50	·01912			
3. 29	17. 30	3. 37	·0973	19. 0	·02406			
3. 43	16. 0	3. 46	·0985	23. 59	·02300			
3. 49	17. 20	3. 58	·0982					
4. 0	15. 45	4. 7	·0991					
4. 10	16. 30	4. 10	·0985					
4. 15	14. 40	4. 22	·1014					
4. 19	16. 0	4. 33	·1004					
4. 30	12. 30	4. 40	·1020					
4. 44	11. 40	5. 6	·0984					
5. 13	15. 30		***					
5. 39	17. 0	5. 33	·0992					
5. 52	12. 30	5. 36	·0960					
6. 12	15. 40	6. 0	·0975					
6. 21	21. 14. 50	6. 22	·0934					
6. 54	20. 57. 20	6. 58	·0939					
7. 10	21. 1. 30	7. 15	·0938					
7. 16	8. 50	7. 22	·0943					
7. 24	6. 50	7. 30	·0940					
8. 25	13. 30	7. 56	·0947					
8. 40	11. 50		***					
9. 25	0. 30	8. 45	·0947					
9. 54	13. 10	9. 7	·0956					
10. 13	6. 30	9. 16	·0950					
10. 28	5. 20	9. 36	·0955					
10. 54	10. 40	10. 6	·0930					
			***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

VERTICAL FORCE.—September 4 at 0h. 30m. the adjustments were altered so that the scale-reading was diminished by 15·8 divisions, or by 0·023668 parts of the whole Vertical Force.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 4		Sept. 4						
h m	° ′ ″	h m		h m		h m	°	°
11. 26	21. 7. 30	10. 40	·0933					
	***	10. 46	·0928					
12. 15	11. 30	11. 2	·0937					
12. 36	10. 20	11. 15	·0933					
12. 43	11. 0	11. 53	·0948					
12. 59	15. 0		***					
13. 26	12. 45	12. 37	·0944					
13. 45	18. 0	13. 0	·0956					
14. 36	9. 30		***					
14. 43	10. 20	13. 43	·0957					
15. 6	8. 0		***					
15. 28	7. 30	13. 50	·0947					
	***		***					
16. 55	11. 30	14. 20	·0942					
17. 8	10. 15	15. 17	·0956					
18. 51	8. 10		***					
19. 12	10. 50	16. 26	·0960					
19. 30	7. 45		***					
19. 51	9. 30	16. 42	·0952					
19. 58	8. 50	16. 50	·0959					
20. 28	12. 10	17. 0	·0955					
20. 51	10. 40	17. 17	·0958					
22. 7	18. 0		***					
23. 43	24. 25	18. 53	·0956					
23. 59	24. 10		***					
		21. 0	·0939					
		21. 26	·0941					
			***					
		22. 25	·0930					
		22. 40	·0933					
		23. 59	·0937					
Sept. 5		Sept. 5		Sept. 5		Sept. 5		
0. 0	21. 24. 10	0. 0	·0937	0. 0	·02300	0. 0	59·0	60·0
0. 44	25. 20	0. 37	·0946	1. 39	·02298	1. 0	60·3	61·4
	***	0. 50	·0940	4. 52	·01852	3. 0	62·7	63·2
1. 37	21. 0	1. 4	·0932	11. 14	{ ·01886	6. 0	64·7	65·9
2. 27	22. 40	1. 13	·0939		·02200	9. 0	65·0	65·8
2. 47	21. 10	1. 30	·0944	14. 9	·02137	12. 0	64·3	65·8
3. 5	21. 20	1. 47	·0936	22. 36	·02428	18. 0	62·5	63·4
4. 30	13. 40	2. 10	·0942	23. 59	·02408	21. 0	62·3	63·2
5. 0	13. 50		***					
6. 10	11. 45	3. 17	·0939					
7. 20	12. 20	3. 26	·0944					
8. 0	10. 0	3. 47	·0925					
8. 17	10. 30		***					
8. 51	9. 45	5. 15	·0943					
10. 10	11. 40	5. 33	·0942					
10. 26	13. 0	5. 56	·0949					
11. 46	12. 30	6. 47	·0946					
11. 59	14. 10	7. 6	·0952					
12. 30	10. 40		***					
12. 46	11. 30	10. 40	·0947					
12. 55	10. 50		***					
13. 7	11. 45	11. 41	·0952					
13. 13	11. 0	11. 53	·0961					
13. 21	12. 20	12. 30	·0950					
13. 35	11. 0	12. 57	·0965					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 5		Sept. 5						
h m	° ′ ″	h m		h m		h m	°	°
13. 55	21. 13. 40	13. 26	·0944					
14. 27	8. 50	13. 48	·0957					
14. 42	7. 50	14. 50	·0942					
15. 30	11. 10	15. 56	·0944					
15. 53	10. 30		***					
16. 10	11. 40	18. 40	·0952					
16. 52	11. 15	22. 35	·0922					
18. 15	7. 20		***					
20. 5	7. 5	23. 6	·0931					
20. 45	8. 10	23. 15	·0928					
22. 10	12. 40	23. 59	·0930					
23. 59	20. 50							
Sept. 6		Sept. 6		Sept. 6		Sept. 6		
0. 0	21. 20. 50	0. 0	·0930	0. 0	·02408	0. 0	62·7	63·2
1. 5	24. 0		***	2. 53	·02470	1. 0	63·3	63·0
2. 25	21. 20	1. 11	·0946	8. 46	·02123	3. 0	63·5	64·3
4. 51	12. 10		***	9. 45	·02000	9. 0	64·8	66·2
7. 44	11. 40	1. 56	·0958	10. 14	·01987	21. 0	58·3	59·0
8. 11	5. 15	2. 47	·0956	10. 39	·02070			
8. 28	1. 10	3. 15	·0955	11. 0	·02012			
9. 11	26. 30	3. 33	·0943	11. 11	·02044			
9. 24	21. 21. 0	3. 57	·0937	11. 20	·01967			
9. 50	20. 59. 30	5. 0	·0951	11. 41	·02018			
9. 59	21. 4. 0	5. 8	·0946	12. 2	·01983			
10. 11	20. 58. 20	7. 11	·0957	12. 27	·02033			
10. 30	21. 16. 0	7. 26	·0964	12. 52	·01950			
10. 45	12. 10	7. 45	·0961	13. 46;	·02074			
10. 48	13. 25	8. 20	·1009	14. 40	·01990			
11. 11	0. 45	8. 34	·1002	14. 59	·01440			
11. 21	11. 10		***	15. 17	·01730			
11. 39	5. 0	8. 40	·1007	15. 26	·01638			
11. 57	18. 30	9. 3	·0908	15. 33	·01742			
12. 26	6. 30	9. 18	·0872		***			
12. 46	14. 10	9. 37	·0908	16. 21	·01366			
12. 54	13. 0	9. 50	·0896	17. 18	·02130			
12. 59	15. 0	10. 14	·0920		***			
13. 13	9. 10	10. 25	·0906	21. 39	·02540			
13. 29	24. 0	10. 37	·0891	21. 53	·02486			
13. 41	40. 10	10. 46	·0919	23. 59	·02452			
13. 46	20. 30	10. 53	·0910					
14. 0	49. 0	11. 12	·0925					
14. 43	6. 45	11. 34	·0903					
15. 7	52. 45		***					
15. 15	35. 10	12. 3	·0938					
15 18	43. 20	12. 15	·0923					
15. 21	41. 0		***					
15. 24	47. 30	12. 48	·0934					
15. 40	19. 0		***					
15. 46	21. 29. 30	13. 7	·0927					
16. 15	20. 59. 30	13. 18	·0965					
	***	13. 32	·0950					
16. 51	21. 6. 10		***					
16. 57	15. 55	13. 46	·0941					
17. 11	1. 10	13. 56	·0904					
	(†)	14. 6	·0935					
20. 42	16. 10	14. 18	·0796					
	***	14. 30	·0847					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 6		Sept. 6						
h m	° ′ ″	h m		h m		h m	°	°
21. 15	21. 21. 20	14. 35	·0816					
	***	14. 38	·0840					
21. 39	16. 50	14. 43	·0826					
	***	14. 50	·0862					
23. 59	24. 0		(†)					
		21. 0	·0834*					
Sept. 7		Sept. 7		Sept. 7		Sept. 7		
0. 0	21. 24. 0		(†)	0. 0	·02452	1. 0	61·3	62·0
	***	1. 0	·0904*		***	3. 0	64·7	65·4
1. 37	30. 0	3. 0	·0923*	1. 26	·02516	9. 0	66·7	67·2
	***	3. 7	·0926	2. 12	·02337	21. 0	59·3	60·2
2. 26	25. 30		***	2. 29	·02342			
2. 40	36. 45	3. 50	·0945	2. 39	·02291			
2. 44	31. 30	4. 20	·0902	3. 11	·02233			
2. 48	36. 0	4. 26	·0906	3. 24	·02337			
2. 52	33. 30		***	3. 40	·02312			
2. 56	35. 50	4. 49	·0889	4. 36	·02022			
3. 12	30. 30	5. 10	·0904	5. 13	·01988			
3. 25	35. 50	5. 18	·0894	5. 40	·02104			
3. 38	22. 0	5. 43	·0968	6. 12	·01950			
3. 41	25. 50	5. 47	·0951	6. 25	·01980			
3. 43	27. 30	5. 52	·0959	6. 45	·01942			
3. 45	28. 15	6. 13	·0883	6. 53	·02045			
4. 0	16. 30	6. 34	·0927	7. 30	·01980			
4. 14	19. 0	6. 47	·0900	10. 16	·01880			
4. 29	15. 0	7. 2	·0909	10. 39	·01902			
5. 19	21. 17. 25	7. 10	·0938	11. 11	·01790			
5. 45	20. 53. 30	7. 17	·0909	11. 43	·01803			
5. 52	21. 6. 30	7. 38	·0913	12. 0	·01864			
5. 55	5. 0		***	13. 37	·01952			
6. 12	16. 15	8. 7	·0910	13. 54	·01920			
6. 23	5. 30		***	15. 44	·02136			
6. 42	12. 40	9. 4	·0918	19. 14	·02542			
6. 55	9. 20		***	23. 59	·02430			
7. 11	9. 10	9. 26	·0939					
7. 15	12. 15		***					
7. 29	8. 30	9. 40	·0937					
8. 7	15. 50	9. 49	·0954					
8. 18	13. 30		***					
	***	10. 25	·0918					
9. 29	13. 10	10. 42	·1024					
9. 49	9. 20	10. 46	·1010					
10. 0	15. 0	10. 48	·1025					
10. 15	13. 50	10. 51	·1013					
10. 27	0. 40	11. 0	·1024					
10. 30	12. 0	11. 15	·0963					
10. 37	19. 0	11. 27	·0937					
	***	11. 42	·0896					
11. 0	26. 0	12. 6	·0940					
11. 7	18. 30	12. 30	·0919					
	***		***					
11. 25	21. 21. 20	12. 39	·0921					
11. 48	20. 57. 20		***					
12. 10	21. 5. 0	13. 18	·0905					
12. 40	3. 0		***					
13. 14	10. 40	13. 41	·0912					
13. 43	22. 0	13. 46	·0930					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 7		Sept. 7						
h m	° ′ ″	h m		h m		h m	°	°
13. 56	21. 16. 30	13. 53	·0908					
14. 11	18. 0	14. 13	·0919					
14. 27	13. 20	14. 30	·0907					
14. 57	14. 45	14. 46	·0919					
	***	14. 54	·0913					
16. 55	9. 0	15. 6	·0918					
	***	15. 17	·0909					
17. 43	10. 40		***					
	***	16. 16	·0925					
18. 21	8. 30		***					
	***	17. 43	·0933					
19. 13	9. 30		***					
19. 16	4. 45	18. 17	·0930					
	***	18. 26	·0935					
19. 40	10. 30	18. 33	·0927					
	***	18. 40	·0933					
20. 9	9. 30		***					
20. 15	12. 10	19. 30	·0924					
20. 20	10. 30		***					
	***	19. 47	·0928					
22. 10	14. 0		***					
22. 27	16. 25	21. 26	·0914					
22. 30	13. 0		***					
22. 40	15. 30	21. 37	·0922					
22. 55	15. 20		***					
23. 59	18. 0	21. 51	·0915					
		22. 33	·0915					
		22. 47	·0928					
		22. 49	·0917					
			***					
		23. 59	·0925					
Sept. 8		Sept. 8		Sept. 8		Sept. 8		
0. 0	21. 18. 0	0. 0	·0925	0. 0	·02430	1. 0	62·4	62·3
	***	1. 6	·0927	0. 29	·02414	3. 0	64·7	65·4
1. 12	20. 50	1. 17	·0916	1. 0	·02450	9. 0	66·3	67·0
1. 26	16. 50	1. 46	·0932	4. 26	·02200	22. 30	58·0	58·4
2. 10	17. 30	1. 50	·0921	6. 11	·01918			
2. 14	16. 40	2. 2	·0928	6. 24	·01935			
2. 44	18. 40	2. 4	·0921	7. 11	·01818			
2. 54	17. 10	2. 30	·0934	13. 21	·01825			
3. 9	18. 40	2. 46	·0919	15. 43	·01946			
3. 17	15. 30	3. 3	·0941	22. 11	·02492			
3. 29	14. 30	3. 10	·0930	23. 59	·02462			
3. 41	15. 20	3. 33	·0953					
4. 21	3. 20	4. 0	·0915					
4. 51	11. 30	4. 20	·0958					
4. 57	9. 30	4. 33	·0950					
5. 14	12. 30	4. 40	·0964					
5. 30	10. 30	4. 47	·0950					
5. 44	12. 20	4. 52	·0956					
6. 0	21. 12. 30	5. 10	·0944					
6. 30	20. 52. 0	5. 26	·0948					
7. 0	21. 3. 30	5. 40	·0953					
7. 39	11. 55	6. 7	·0904					
7. 45	10. 15	6. 30	·0958					
8. 26	13. 50	6. 46	·0945					
16. 17	10. 50	6. 56	·0947					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 8		Sept. 8						
h m	° ′ ″	h m		h m				
17. 26	21. 12. 0	7. 4	·0938					
			***					
17. 42	14. 10							
17. 51	13. 30	7. 34	·0928					
18. 31	19. 10		***					
	***	8. 4	·0912					
			***					
20. 14	12. 0							
	***	8. 33	·0928					
21. 43	15. 40	9. 7	·0933					
21. 51	13. 55	9. 20	·0925					
23. 40	17. 20	9. 40	·0930					
23. 45	16. 5		***					
23. 54	18. 30	14. 53	·0938					
23. 59	17. 45		***					
		15. 20	·0944					
			***					
		16. 35	·0938					
		16. 45	·0943					
			***					
		17. 33	·0935					
		17. 45	·0919					
			***					
		18. 17	·0905					
			***					
		18. 40	·0915					
		19. 10	·0933					
			***					
		20. 20	·0927					
			***					
		20. 47	·0914					
		21. 30	·0919					
		21. 46	·0912					
		22. 45	·0921					
		23. 3	·0916					
		23. 59	·0919					
Sept. 9		Sept. 9		Sept. 9		Sept. 9		
0. 0	21. 17. 45	0. 0	·0919	0. 0	·02462	7. 0	61 ·0	62 ·0
0. 7	17. 15	0. 26	·0921	2. 10	·02455	21. 0	53 ·3	54 ·0
0. 18	18. 30	0. 45	·0933	9. 54⁏	·02143			
0. 24	17. 50	1. 4	·0925	16. 42	·02474			
0. 45	20. 50	1. 47	·0925	19. 41	·02312			
0. 57	19. 5		***	22. 33	·02077			
1. 6	20. 0	2. 35	·0934	23. 59	·02012			
1. 15	18. 40	2. 46	·0930					
1. 37	18. 25		***					
1. 56	19. 0	4. 2	·0941					
2. 16	18. 40		***					
2. 45	15. 50	6. 50	·0946					
4. 12	13. 20	7. 6	·0937					
	***	8. 0	·0947					
15. 57	11. 20	8. 16	·0941					
16. 10	12. 30	8. 38	·0946					
17. 10	10. 40	8. 46	·0943					
17. 48	11. 30		***					
20. 7	8. 0	18. 53	·0948					
	***		***					
22. 18	17. 30	20. 37	·0934					
	***		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 9		Sept. 9						
h m	° ′ ″	h m		h m		h m	°	°
23. 30	21. 18. 15	22. 20	·0930					
	(†)	23. 59	·0935					
Sept. 10		Sept. 10		Sept. 10		Sept. 10		
	(†)	0. 0	·0935	0. 0	·02012	1. 0	56 ·8	57 ·2
1. 0	21. 20. 56*	1. 2	·0936	0. 41	·02010	3. 0	58 ·4	58 ·8
3. 0	18. 19*		***	2. 15	·01868	9. 0	60 ·0	60 ·6
3. 16	16. 20	1. 33	·0947	6. 41	·01477	21. 0	53 ·0	53 ·6
3. 40	13. 40	2. 17	·0941	11. 42	·01344			
4. 11	13. 0		***	13. 14	·01392			
4. 30	14. 10	3. 10	·0955	13. 52⁏	·01377			
5. 7	12. 45	3. 32	·0946	14. 14	·01328			
6. 43	12. 45	4. 7⁏	·0943	14. 45	·01350			
7. 27	9. 10	4. 33	·0950	16. 20	·01562			
7. 45	8. 50	4. 42	·0947	21. 45	·02044			
8. 7	10. 0	4. 56	·0949	23. 2	·01948			
8. 28	7. 30	5. 17	·0943		(†)			
9. 27	11. 20	5. 46	·0940					
10. 12	10. 10	6. 36	·0944					
10. 25	11. 10	6. 54	·0950					
10. 39	10. 40	7. 6	·0957					
10. 52	12. 10	7. 24	·0944					
11. 42	9. 15	8. 46	·0950					
11. 58	10. 35	9. 5	·0949					
12. 14	8. 50	9. 17	·0959					
12. 30	8. 45	9. 45	·0951					
12. 51	12. 30	10. 33	·0966					
13. 13	11. 30	10. 47	·0955					
13. 30	16. 20	11. 20	·0968					
13. 49	13. 50	11. 47	·0961					
14. 11	22. 10	12. 18	·0962					
14. 22	22. 0	13. 22	·0955					
15. 13	21. 5. 10	13. 45	·0963					
15. 45	20. 58. 30	14. 36	·0939					
15. 59	20. 58. 25	15. 3	·0942					
16. 39	21. 6. 40		***					
17. 7	8. 0	16. 4	·0953					
17. 52	6. 30	16. 26	·0952					
18. 21	8. 0	17. 0	·0958					
18. 45	6. 40		***					
18. 55	8. 30	18. 37	·0938					
19. 13	8. 30	18. 46	·0946					
19. 42	6. 50	19. 21⁏	·0943					
20. 11	9. 5	19. 47	·0948					
20. 16	8. 30	20. 16	·0940					
21. 51	18. 15	23. 2	·0938					
21. 59	16. 10	23. 59	·0943					
22. 50	22. 0							
23. 6	20. 20							
	(†)							
Sept. 11		Sept. 11		Sept. 11		Sept. 11		
	(†)	0. 0	·0943		(†)	1. 0	56 ·3	57 ·2
0. 27	21. 17. 0		***	0. 28	·01810	3. 0	59 ·0	59 ·6
0. 46	17. 20	1. 10	·0946	1. 13	·01764	9. 0	61 ·1	62 ·0
0. 54	16. 30	1. 20	·0949	3. 49	·01422	21. 0	53 ·0	53 ·8
1. 20	17. 30		***	6. 19	·01163			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁏ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. of H. F. Magnet.	of V. F. Magnet.
Sept.11		Sept.11		Sept.11				
h m	° ′ ″	h m		h m				°
1.46	21.16.15	2.32	·0944	7.10	{·01200			
3. 5	15.30		***		·01296			
3.30	13.55	3. 7	·0950	12.54	·01422			
5. 7	11.30	3.32	·0934	17.34	·01710			
5.58	13.15		***	22.47	{·02172			
6.13	12.30	4.47	·0937		·02087			
12.42	11.30		***	23.59	·02108			
13.13	13. 0	6.45	·0946					
13.31	11. 0		***					
13.55	11.55	7.45	·0943					
20.14	10.15	8. 2	·0952					
23. 0	16.30		***					
23.59	17. 0	8.17	·0943					
		8.46	·0950					
		9.15	·0947					
		9.33	·0952					
			***					
		12. 5	·0950					
		12.30	·0946					
		12.48	·0961					
		13.22	·0950					
		17. 0	·0956					
		20.46	·0944					
			***					
		22.15	·0942					
		23.59	·0954					
Sept.12		Sept.12		Sept.12		Sept.12		
0. 0	21.17. 0	0. 0	·0954	0. 0	·02108	0. 0	54·0	55·0
1.14	16.20	1.50	·0955	2. 0	·02033	1. 0	55·4	56·0
2.59	11.10	2.51	·0948	11.12:	·01335	3. 0	58·0	58·0
3.32	10. 0	3. 4	·0952	21.37	·01952	6. 0	60·5	62·0
5.28	11.30		***	23.49	{·01960	9. 0	60·5	60·5
10.13	11.10	3.26	·0943		·01765	12. 0	60·0	60·7
12.29	11.45		***	23.59	·01763	18. 0	54·5	56·5
13. 0	11. 5	4.15	·0939			21. 0	54·0	55·0
13.24	8.50	4.32	·0945					
16.47	12.10		***					
17.11	11. 0	5.16	·0935					
17.28	11.15		***					
18.32	9.30	6.52	·0949					
18.56	10. 0		***					
19.43	8.30	11.37	·0955					
21. 3	11.50		***					
21.39	16.25	12.54	·0952					
22.43	19.30	13.53	·0957					
	(†)		***					
		18.46	·0957					
			***					
		22.45	·0933					
			***					
		23.59	·0935					
Sept.13		Sept.13		Sept.13		Sept.13		
	(†)	0. 0	·0935	0. 0	·01763	0. 0	57·2	57·8
0.30	21.17.30	1.15	·0942	1.26	·01620	1. 0	59·6	59·3
4.53	8.30	2.57	·0936	3.11	{·01370	3. 0	62·7	63·9
6.48	10.25	3.52	·0938		·01746	9. 0	63·2	63·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. of H. F. Magnet.	of V. F. Magnet.
Sept.13		Sept.13		Sept.13		Sept.13		
h m	° ′ ″	h m		h m				
7.14	21. 9.10	5.13	·0935	5.19	·01478	21. [illegible]	[illegible]	[illegible]
[illegible]	11.15	8.45	·0941	5.57	{·016[illegible]			
15.10	11.30	9. 6	·0946		·01[illegible]			
17.13	9.30	9.35	·0944	9. 0	{·01703			
17.42	7.50	10. 2	·0940		·01840			
18.27	8.30		***	13.42:	·01910			
20.24	7.20	13.56	·0959	20.41	·02385			
23.59	16.50	18.52	·0956	23.59	·02293			
		22.59	·0924					
		23.59	·0925					
Sept.14		Sept.14		Sept.14		Sept.14		
0. 0	21.16.50	0. 0	·0925	0. 0	·02293	1. [illegible]	[illegible]	[illegible]
1. 8	18. 0	2. 6	·0936	2.21	·02095	3. [illegible]	[illegible]	[illegible]
3.51	11.30	2.57	·0936	4.40	{·01708	[illegible]	[illegible]	[illegible]
5.21	10.50	4. 6:	·0930		·02077	21. [illegible]	[illegible]	[illegible]
6.13	7.50	5.20	·0941	10. 6	·02160			
11.27	12.40	5.51:	·0934	13.57	·02380			
16.15	11. 0	6.15	·0938	20.46	{·02318			
19.29	7.45	7. 5	·0935		·02237			
20.27	8.50		***	23.59	·02242			
22.15	18.45	10.26	·0952					
23.59	23. 0	10.47	·0952					
		11. 6	·0955					
		11.25	·0950					
			***					
		15.40	·0959					
		17. 8	·0957					
		22.24	·0929					
		23.59	·0941					
Sept.15		Sept.15		Sept.15		Sept.15		
0. 0	21.23. 0	0. 0	·0941	0. 0	·02242	1. [illegible]	[illegible]	[illegible]
0.56	22. 0	0.46	·0946	1.15	{·02220	3. 0	62·3	62·2
	***	1.33	·0954		·02158	[illegible]	[illegible]	63·3
3.11	14. 0	2. 2	·0951	6.10	·01880	21. [illegible]	[illegible]	[illegible]
3.54	13. 0	2.10	·0954	9.25	·01760			
4. 0	14. 0	2.40	·0946	9.59	·01702			
4.19	12.20	3. 7:	·0949	11. 0	·01696			
4.29	13.50	3.30	·0946	11.40	·01737			
4.48	12.20		***	12.24	·01735			
5. 7	13.15	3.46	·0954	12.52	·010[illegible]			
7.43	11.30	3.54	·0940	14. 0	·01752			
8. 5	9.40		***	15.52	·01625			
8.41	9.50	4.15	·0950	17. 3	·01789			
9. 6	1.30	4.40	·0935	19.55	·016[illegible]			
9.51	12.30	5.17	·0951	23.59	·02284			
10.13	5.40		***					
10.37	7.30	6. 2	·0938					
10.42	6.45		***					
10.49	8.20	6.46	·0950					
11.13	2.30	6.56	·0946					
11.27	3. 0	7.20	·0951					
11.42	6.30	8.17	·0952					
11.51	6.20	8.52	·0988					
12.14	15.15	9. 6	·0987					
12.53	1.10	9.10	·1008					
13. 7	0. 0	9.27	·0990					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Sept.15		Sept.15						
h m	° ′ ″	h m		h m		h m	°	°
13. 13	20. 57. 0	9. 33	·0995					
13. 39	20. 58. 55	9. 45	·0978					
14. 10	21. 5. 20		***					
14. 15	2. 0	10. 10	·0969					
14. 17	6. 50	10. 17	·0973					
14. 21	2. 30		***					
14. 26	21. 4. 0	10. 40	·0967					
14. 30	20. 57. 0	10. 46	·0951					
14. 35	58. 10		***					
14. 42	20. 55. 30	11. 10	·0939					
14. 53	21. 12. 30	11. 32	·0954					
14. 58	11. 15	11. 46	·0950					
15. 7	14. 30	11. 49	·0937					
15. 13	6. 30	12. 10	·0960					
	***	12. 15	·0956					
15. 39	1. 30	12. 18	·0959					
15. 42	9. 0	12. 36	·0954					
15. 54	1. 20		***					
15. 58	4. 30	12. 50	·0966					
16. 12	4. 20	13. 3	·0954					
16. 28	0. 0		***					
16. 40	0. 5	13. 40	·0953					
16. 48	2. 10	13. 46	·0961					
16. 55	1. 30	13. 48	·0956					
17. 10	4. 30	14. 2	·0977					
17. 36	14. 0	14. 15	·0955					
17. 49	12. 50		***					
18. 13	17. 50	14. 23	·0962					
18. 24	16. 20	14. 37	·0920					
	***	15. 2	·0943					
19. 21	22. 30	15. 6	·0926					
19. 40	17. 40	15. 17	·0936					
19. 58	17. 0	15. 25	·0919					
20. 5	18. 15	15. 33	·0928					
20. 13	14. 30	15. 37	·0923					
20. 24	16. 30	15. 46	·0941					
20. 30	14. 0		***					
20. 37	16. 30	16. 4	·0939					
20. 43	14. 30	16. 25	·0915					
20. 46	18. 15	16. 46	·0937					
20. 58	16. 50	17. 0	·0933					
21. 15	26. 0	17. 10	·0946					
21. 28	27. 30	17. 35	·0944					
22. 11	22. 30	17. 40	·0936					
	***	17. 47	0938					
23. 0	25. 0	18. 6	·0923					
	***	18. 17	·0924					
23. 36	21. 0	18. 33	·0912					
23. 46	25. 0	19. 4	·0912					
23. 59	24. 30	19. 26	·0900					
		19. 40	·0886					
		19. 46	·0892					
		19. 48	·0886					
		20. 3	·0892					
		20. 7	·0878					
		20. 10	·0891					
		20. 16	·0879					
		20. 30	·0898					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Sept.15						
h m	° ′ ″	h m		h m		h m	°	°
		20. 52	·0862					
		21. 25	·0881					
		21. 36	·0877					
		21. 45	·0881					
		21. 47	·0871					
		22. 46	·0854					
		23. 7	·0872					
		23. 18	·0859					
		23. 40	·0878					
		23. 47	·0869					
		23. 59	·0871					
Sept.16		Sept.16		Sept.16		Sept.16		
0. 0	21. 24. 30	0. 0	·0871	0. 0	·02284	6. 50	62 ·0	62 ·8
0. 15	20. 30	0. 17	·0868	0. 30	·02340	21. 0	62 ·6	63 ·2
	***	0. 50	·0899	3. 15	·02237			
0. 59	21. 30		***	3. 49	·02280			
	***	2. 7	·0913	5. 30	·02170			
2. 10	20. 0		***	8. 39	·02084			
2. 30	17. 0	2. 36	·0904	13. 55	·02107			
2. 43	17. 45		***	18. 20	{ ·02180			
2. 55	16. 50	3. 7	·0916		·01925			
3. 9	19. 0	3. 20:	·0900	23. 59	·01983			
3. 24	11. 30	3. 40	·0928					
	***		***					
3. 52	12. 15	3. 47	·0925					
4. 1	10. 0	3. 52	·0935					
5. 14	15. 0	4. 6	·0918					
5. 54	11. 0		***					
6. 27	15. 10	5. 10	·0925					
6. 58	10. 30		***					
7. 22	13. 10	5. 45	·0916					
7. 39	12. 30	5. 56	·0932					
7. 51	8. 15	6. 17	·0938					
8. 13	10. 20	6. 32	·0928					
8. 35	6. 10	6. 53	·0926					
8. 45	10. 10	7. 40	·0945					
8. 59	8. 30	8. 7	·0942					
9. 25	9. 55	8. 26	·0968					
9. 40	8. 20	8. 52	·0943					
	***	9. 7	·0946					
11. 51	11. 50	9. 15	·0960					
12. 18	10. 30	9. 26	·0954					
12. 42	11. 30		***					
12. 53	10. 30	10. 40	·0956					
13. 12	12. 0	10. 56	·0948					
13. 29	10. 30	11. 7	·0954					
18. 22	9. 20	11. 13	·0944					
18. 39	7. 0		***					
18. 53	9. 30	12. 32	·0950					
19. 14	7. 40	13. 35	·0946					
20. 22	9. 0	14. 7	·0950					
20. 30	7. 45	14. 33	·0945					
22. 37	14. 10	14. 37	·0948					
23. 59	18. 50		***					
		15. 33	·0945					
		17. 56	·0945					
		19. 5	·0939					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Sept.16						
h m	° ′ ″	h m		h m		h m	°	°
		20. 20	·0919					
		20. 36	·0921					
		20. 50	·0912					
		21. 2	·0915					
		22. 3	·0909					
			***					
		22. 46	·0918					
		23. 59	·0926					
Sept.17		Sept.17		Sept.17		Sept.17		
0. 0	21. 18. 50	0. 0	·0927	0. 0	·01983	1. 0	63·8	64·5
0. 14	21. 10		***	1. 45	·01980	3. 0	64·0	64·8
1. 8	19. 30	0. 30	·0931	6. 30	·01870	9. 0	64·0	65·0
1. 25	20. 40		***	10. 16	·01947	21. 0	62·2	63·8
4. 16	15. 15	0. 51	·0948	12. 28	·01940			
	***		***	14. 12	·02000			
7. 59	15. 0	3. 36	·0952	20. 30	·02086			
8. 8	13. 30		***	23. 59	·02090			
9. 29	10. 50	4. 2	·0957					
9. 54	4. 20		***					
10. 22	10. 40	4. 26	·0953					
10. 47	11. 30	4. 32	·0958					
11. 15	5. 20	4. 36	·0952					
11. 30	4. 30		***					
12. 7	12. 5	4. 53	·0957					
12. 30	8. 30	5. 20	·0953					
13. 10	8. 40	5. 36	·0959					
13. 40	5. 50	5. 45	·0954					
13. 52	6. 15	5. 52	·0961					
14. 19	10. 0	6. 3	·0958					
14. 31	13. 30	6. 15	·0966					
	***	6. 18	·0954					
17. 54	11. 15	6. 33	·0965					
18. 10	10. 0		***					
21. 5	8. 30	6. 50	·0957					
23. 59	18. 50		***					
		7. 7	·0960					
		7. 15	·0972					
			***					
		7. 35	·0960					
			***					
		7. 46	·0981					
		7. 48	·0973					
		7. 53	·0986					
		8. 2	·0946					
		8. 10	·0962					
		8. 17	·0954					
		8. 33	·0964					
			***					
		9. 7	·0956					
			***					
		9. 42	·0958					
		9. 46	·0961					
		10. 11	·0951					
			***					
		10. 40	·0956					
		11. 2	·0978					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Sept.17						
h m	° ′ ″	h m		h m		h m	°	°
		11. 7	·0973					
		11. 15	·0977					
		11. 36	·0959					
		11. 45	·0961					
		11. 50	·0953					
		12. 0	·0958					
		12. 6	·0954					
		12. 20	·0960					
			***					
		14. 33	·0940					
		15. 6	·0949					
			***					
		16. 13	·0947					
			***					
		17. 50	·0950					
			***					
		22. 40	·0926					
			***					
		23. 41	·0931					
			***					
		23. 59	·0939					
Sept.18		Sept.18		Sept.18		Sept.18		
0. 0	21. 18. 50	0. 0	·0939	0. 0	·02090	1. 0	61·3	62·2
0. 11	18. 20		***	4. 39	·02104	3. 0	61·0	62·0
0. 59	19. 40	3. 10	·0952	6. 15	{ ·02050	9. 0	59·8	61·0
4. 16	17. 0	3. 17	·0948		·01832	21. 0	54·7	56·5
5. 45	13. 40	3. 50	·0956	11. 27	·01850			
7. 54	13. 30	4. 7	·0053	21. 33	·01538			
8. 26	11. 30	4. 33	·0959		(†)			
8. 57	13. 0	4. 47	·0954					
9. 51	11. 20	5. 2	·0958					
16. 15	12. 20	5. 20	·0952					
16. 54	10. 30	5. 46	·0958					
17. 40	11. 30		***					
17. 57	9. 50	6. 37	·0955					
18. 15	11. 15	7. 17	·0961					
19. 44	9. 5	7. 52	·0961					
	***	8. 13	·0958					
20. 57	8. 30		***					
	***	8. 47	·0962					
22. 14	11. 50		***					
23. 15	19. 30	12. 6	·0960					
23. 29	18. 30		***					
23. 59	19. 15	16. 50	·0969					
			***					
		19. 7	·0970					
			***					
		21. 17	·0948					
		21. 42	·0953					
		22. 13	·0935					
		22. 20	·0938					
		22. 45	·0927					
			***					
		23. 40	·0928					
		23. 59	·0935					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept.19		Sept.19		Sept.19		Sept.19		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 19. 15	0. 0	·0935		(†)	0. 0	57·6	58·2
1. 20	20. 30		***	0. 43	·00809	1. 0	58·2	58·6
	***	0. 46	·0949	3. 42	·00651	3. 0	60·6	60·7
3. 24	19. 0		***	5. 50:	·00486	6. 0	61·5	61·8
3. 56	16. 20	2. 10	·0945	9. 9	·00620	9. 0	61·5	63·0
7. 29	12. 40	2. 52	·0951	13. 13	·00580	12. 0	60·9	62·0
8. 53	21. 13. 30	3. 26	·0944	16. 50	·00730	18. 0	57·5	57·7
9. 30	20. 55. 30	4. 15	·0946	21. 15	·01010	21. 0	57·8	57·9
9. 52	21. 1. 0		***	22. 55	·00990			
10. 15	20. 58. 20	5. 40	·0956	23. 59	·01028			
11. 0	21. 7. 25	6. 5	·0950					
11. 14	2. 30		***					
11. 32	2. 20	7. 15	·0960					
11. 51	10. 0	7. 33	·0956					
11. 56	9. 0	7. 48	·0960					
12. 10	9. 30	8. 0	·0958					
12. 42	6. 20	8. 10	·0961					
12. 55	8. 15	8. 17	·0957					
13. 54	0. 50	8. 31	·0960					
14. 9	2. 15	8. 45	·0955					
14. 15	1. 20	9. 16	·0974					
14. 43	6. 0		***					
14. 56	6. 10	10. 20	·0940					
15. 12	3. 15	10. 33	·0942					
15. 20	3. 30	10. 46	·0931					
15. 57	11. 0		***					
16. 30	14. 30	11. 45	·0947					
17. 26	9. 40	12. 15	·0938					
17. 40	12. 30	12. 50:	·0961					
17. 58	10. 45	13. 17	·0952					
18. 15	14. 20	13. 20	·0955					
18. 40	15. 0	13. 33	·0951					
18. 45	14. 0	13. 43	·0959					
18. 51	14. 40	14. 5	·0943					
18. 57	13. 40		***					
19. 15	13. 20	15. 12	·0951					
19. 22	14. 0	15. 45:	·0944					
20. 12	9. 30	16. 38	·0964					
20. 27	11. 0		***					
20. 30	10. 0	18. 6	·0938					
20. 41	11. 15	18. 25	·0943					
20. 55	8. 30	18. 40	·0939					
21. 39	10. 40	19. 11	·0952					
21. 45	10. 0		***					
21. 57	12. 45	21. 17	·0933					
22. 13	12. 20	21. 40	·0942					
22. 53	16. 0		***					
23. 6	15. 30	22. 46	·0922					
23. 40	21. 40		***					
23. 59	22. 15	23. 5	·0921					
			***					
		23. 36	·0938					
			***					
		23. 59	·0931					
Sept.20		Sept.20		Sept.20		Sept.20		
0. 0	21. 22. 15	0. 0	·0931	0. 0	·01028	0. 0	59·0	59·6
0. 14	20. 30	0. 15	·0920	1. 40	·00962	1. 0	59·8	60·2

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept.20		Sept.20		Sept.20		Sept.20		
h m	° ′ ″	h m		h m		h m	°	°
0. 42	21. 21. 30	2. 36	·0945	4. 7	·00788	3. 0	62·3	63·2
1. 18	16. 30	2. 45	·0935	7. 52	·01088	9. 0	63·3	64·0
1. 29	17. 40		***	10. 22	·01090	21. 0	61·3	62·0
1. 43	17. 20	3. 7	·0934	15. 28	·01270			
2. 25	20. 50	3. 15	·0927	19. 26	·01309			
2. 37	19. 50	3. 19	·0934	23. 59	·01252			
2. 54	21. 20	3. 43	·0920					
3. 14	16. 30	4. 35	·0948					
3. 21	18. 20	5. 7	·0933					
3. 47	14. 0	5. 38	·0946					
4. 38	15. 10	5. 50	·0940					
5. 7	13. 0		(†)					
5. 29	13. 45	6. 46	·0941					
6. 3	21. 8. 30	6. 56	·0955					
6. 14	20. 58. 20		***					
6. 25	21. 9. 0	7. 20	·0950					
6. 30	7. 40	7. 33	·0945					
6. 39	9. 25	8. 5	·0942					
6. 52	2. 40		***					
6. 58	6. 30	9. 8	·0949					
7. 40	11. 15	9. 25	·0962					
8. 55	11. 20	10. 3	·0948					
9. 12	9. 30	10. 35	·0959					
9. 42	14. 0		***					
	***	11. 26	·0951					
11. 0	7. 15	12. 30	·0953					
11. 52	12. 55	13. 26	·0959					
12. 30	11. 0		***					
13. 12	13. 10	18. 7	·0953					
13. 57	10. 50		***					
14. 19	11. 10	22. 3	·0920					
15. 51	7. 50		***					
17. 14	9. 45	22. 42	·0925					
19. 50	7. 0		***					
20. 39	8. 30	23. 10	·0921					
22. 15	16. 40	23. 36	·0930					
23. 12	17. 15		***					
23. 28	18. 40	23. 59	·0930					
23. 54	17. 15							
23. 59	17. 30							
Sept.21		Sept.21		Sept.21		Sept.21		
0. 0	21. 17. 30	0. 0	·0930	0. 0	·01252	1. 0	62·5	63·0
0. 49	18. 30	1. 13	·0943	1. 25	·01275	3. 0	64·0	64·4
1. 0	20. 0	2. 7	·0932	2. 51	·01148	9. 0	64·0	64·8
2. 10	19. 10	3. 5	·0946	4. 1	{ ·01095 ·01163	21. 0	60·8	61·3
2. 30	16. 45		***					
4. 52	13. 40	4. 15	·0940	5. 30	{ ·01228 ·01467			
5. 10	11. 20	4. 47	·0943					
5. 39	11. 20	5. 6	·0952	11. 49:	·01488			
5. 45	9. 45	5. 30	·0952	19. 20	·01929			
6. 12	11. 40	5. 51	·0957	23. 59	·02013			
7. 42	11. 0	6. 17	·0953					
8. 10	11. 45	9. 20	·0949					
14. 4	12. 10	14. 0	·0961					
14. 30	14. 40	14. 37	·0960					
15. 20	10. 40	14. 40	·0965					
18. 26	9. 0	15. 37	·0961					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept.21		Sept.21						
h m	° ' "	h m		h m		h m	°	°
18. 46	21. 7. 40	16. 15	·0963					
19. 10	8. 0	19. 37	·0956					
19. 24	7. 0		***					
19. 49	7. 50	22. 0	·0936					
20. 37	7. 0	22. 40	·0933					
21. 21	8. 40	23. 59	·0941					
21. 47	11. 30							
21. 57	11. 20							
23. 10	16. 15							
23. 59	18. 20							
Sept.22		Sept.22		Sept.22		Sept.22		
0. 0	21. 18. 20	0. 0	·0941	0. 0	·02013	1. 0	62·2	62·5
0. 11	18. 15	0. 33	·0941	1. 48	·02030	3. 0	63·0	63·0
0. 58	20. 10	0. 46	·0939		·01660	9. 0	61·3	63·0
1. 14	22. 10	1. 12	·0946	9. 43:	·01508	22. 35	56·0	58·0
1. 50	21. 50	1. 43	·0947	20. 29	·01900			
2. 46	17. 20	2. 0	·0942	23. 59	·01603			
3. 5	17. 50	2. 18	·0945					
4. 7	15. 15	2. 37	·0941					
4. 56	11. 0	3. 6	·0953					
5. 37	9. 50		***					
7. 54	11. 50	4. 47	·0953					
8. 12	11. 0	5. 46	·0960					
8. 48	11. 15	6. 17	·0959					
9. 11	9. 50	7. 15	·0963					
9. 54	9. 55		***					
10. 26	12. 40	8. 40	·0959					
10. 48	11. 30	9. 11	·0963					
11. 13	12. 40		***					
13. 21	12. 15	17. 45	·0967					
13. 29	13. 10	21. 17	·0948					
13. 43	12. 30	23. 59	·0959					
13. 55	13. 40							
15. 22	11. 40							
17. 7	12. 0							
19. 19	10. 0							
20. 46	11. 30							
23. 59	17. 10							
Sept.23		Sept.23		Sept.23		Sept.23		
0. 0	21. 17. 10	0. 0	·0959	0. 0	·01603	6. 11	58·0	58·8
1. 4	18. 40	0. 35	·0959	3. 0	·01628	21. 0	53·0	54·7
1. 27	20. 10	0. 56:	·0958	9. 52:	·01507			
2. 10	18. 40	1. 30	·0961	16. 29	·01650			
2. 36	18. 45	2. 3	·0957	19. 0	·01563			
3. 1	16. 50	2. 30	·0960	23. 40	·01238			
4. 52	13. 30	2. 56	·0957		·01064			
12. 13	12. 55		***	23. 59	·01072			
12. 29	12. 10	14. 17	·0973					
12. 45	13. 45		***					
13. 40	12. 0	19. 8	·0971					
13. 59	13. 15		***					
14. 37	11. 55	21. 47	·0955					
15. 8	12. 50	23. 59	·0961					
16. 54	11. 20							
17. 19	12. 5							
19. 52	7. 15							
19. 58	8. 10							
20. 17	8. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept.23								
h m	° ' "	h m		h m		h m	°	°
21. 28	21. 10. 0							
23. 59	20. 5							
Sept.24		Sept.24		Sept.24		Sept.24		
0. 0	21. 20. 5	0. 0	·0961	0. 0	·01072	1. 0	54·8	55·6
1. 11	22. 0	1. 17	·0969	1. 30:	·01095	3. 0	57·2	57·2
1. 43	20. 30	1. 32	·0964	5. 14	·00810	9. 0	58·7	59·0
2. 35	19. 30	1. 56	·0967	12. 22:	·00622	21. 0	52·3	54·0
3. 12	16. 30		***	23. 21	·01022			
4. 30	13. 40	2. 28	·0966		(†)			
8. 0	12. 40	2. 47	·0956					
8. 31	7. 20	3. 2	·0955					
9. 13	11. 50	6. 0	·0969					
10. 41	12. 50		***					
13. 43	11. 10	7. 45	·0968					
15. 0	6. 30	8. 5	·0971					
16. 45	10. 15	8. 46	·0962					
18. 27	8. 45		***					
19. 43	5. 40	14. 56	·0973					
20. 47	9. 10	15. 52	·0966					
21. 16	8. 30		***					
23. 59	16. 30	18. 33:	·0970					
			***					
		20. 30	·0954					
			***					
		23. 59	·0955					
Sept.25		Sept.25		Sept.25		Sept.25		
0. 0	21. 16. 30	0. 0	·0955		(†)	1. 0	53·0	54·0
1. 5	17. 30	3. 30	·0962	0. 25	·01083	3. 0	55·3	55·5
4. 12	12. 10	4. 0	·0966	2. 11	·01100	9. 0	56·3	57·4
5. 24	11. 10	4. 22	·0962	6. 42	·00789	21. 0	[illegible]	52·2
5. 56	14. 10	5. 5	·0970	8. 30	·00710			
6. 31	13. 0	5. 20	·0967	11. 27	·00712			
6. 49	13. 30	5. 36	·0963	12. 0	·00744			
7. 13	9. 50	5. 50	·0980	12. 55	·00720			
7. 50	13. 50	6. 0	·0982	13. 39	·00738			
8. 13	13. 45	6. 46:	·0965	14. 10	·00685			
8. 31	14. 50	7. 33	·0984	15. 13	·00793			
9. 11	12. 50	7. 48:	·0977	15. 45	·00768			
10. 2	13. 10	8. 10	·0989	16. 29	·00820			
10. 13	11. 15	8. 26	·0975	18. 32	·00864			
10. 24	12. 10		***	21. 51	·01060			
10. 43	11. 30	9. 5	·0974	22. 11	·01034			
10. 58	13. 30	9. 10	·0983	23. 59	·01069			
11. 21	12. 40		***					
11. 51	6. 0	10. 36	·0979					
11. 57	8. 0	10. 45	·0974					
12. 13	6. 30		***					
12. 17	21. 7. 30	11. 6	·0980					
13. 2	20. 59. 30		***					
13. 30	21. 6. 45	11. 42	·0965					
14. 11	20. 53. 0	11. 50	·0976					
14. 39	57. 40		***					
14. 43	20. 56. 45	13. 7	·0990					
15. 13	21. 8. 10	13. 26	·0974					
15. 50	1. 30	13. 33	·0991					
16. 9	5. 50	13. 47	·0964					
16. 13	5. 10		***					
16. 22	6. 55	14. 10	·0951					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 25		Sept. 25						
h m	° ′ ″	h m		h m		h m	°	°
16. 43	21. 4. 40	14. 20	·0952					
16. 58	6. 30	14. 28	·0957					
17. 11	5. 40	14. 35	·0953					
17. 42	8. 0		***					
17. 55	11. 40	15. 2	·0965					
	(†)	15. 10	·0976					
19. 12	16. 0	15. 17	·0968					
19. 30	9. 40	15. 24	·0975					
19. 43	10. 25	15. 40	·0964					
19. 51	9. 0	15. 52	·0970					
20. 28	9. 10	16. 26	·0967					
21. 19	11. 30	16. 47	·0977					
21. 50	13. 50		***					
21. 57	13. 40	17. 45	·0976					
22. 11	15. 0	18. 7	·0985					
22. 16	14. 0		***					
22. 28	15. 5	18. 45	·0966					
22. 42	17. 15		***					
23. 6	16. 0	19. 5	·0958					
23. 41	19. 30	19. 17	·0962					
23. 59	20. 25	19. 30	·0951					
			***					
		20. 7	·0952					
		20. 15	·0947					
		20. 42	·0954					
			***					
		21. 33	·0947					
			***					
		22. 6	·0952					
			***					
		22. 37	·0943					
		22. 50	·0950					
		23. 0	·0944					
		23. 36	·0957					
		23. 51	·0952					
		23. 59	·0957					
Sept. 26		Sept. 26		Sept. 26		Sept. 26		
0. 0	21. 20. 25	0. 0	·0957	0. 0	·01069	0. 0	53 ·0	53 ·8
0. 30	21. 30	0. 7	·0950	0. 26	{ ·01050	1. 0	54 ·8	56 ·2
1. 37	20. 0	0. 40:	·0957		·00986	3. 0	57 ·3	58 ·2
	***	1. 26	·0943	6. 9	·00523	6. 0	59 ·5	59 ·5
2. 47	16. 0	1. 57	·0959	9. 50	{ ·00672	9. 0	58 ·9	59 ·0
	***	2. 17	·0962		·00735	12. 0	58 ·0	58 ·4
3. 42	16. 15	2. 26	·0960	11. 11	·00669	18. 0	56 ·3	57 ·3
3. 49	14. 50	2. 42	·0961	14. 15	·00701	21. 0	56 ·0	57 ·8
4. 51	14. 10	2. 46	·0957	15. 21	·00677			
5. 13	15. 10	3. 30	·0964	23. 59	·00850			
5. 24	14. 40		***					
5. 43	16. 0	3. 52	·0956					
6. 13	11. 30		***					
6. 44	8. 10	4. 50	·0957					
6. 54	8. 0	5. 11	·0967					
7. 17	11. 45	5. 35	·0963					
7. 42	11. 10	5. 47	·0968					
7. 52	14. 0	5. 58	·0963					
8. 26	9. 0		***					
9. 30	10. 0	6. 17	·0965					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 26		Sept. 26						
h m	° ′ ″	h m		h m		h m	°	°
9. 54	21. 12. 45	6. 30	·0956					
10. 18	10. 50	6. 45	·0962					
10. 37	13. 40	6. 51	·0957					
10. 48	21. 12. 20	7. 7	·0965					
11. 15	20. 59. 20		***					
11. 30	21. 8. 0	7. 33:	·0959					
11. 41	6. 10	7. 40	·0961					
12. 12	10. 50	7. 45	·0990					
12. 24	9. 20	8. 6	·0950					
	***	8. 17	·0959					
13. 41	7. 0	8. 26	·0969					
13. 50	9. 10		***					
14. 9	9. 0	9. 0	·0957					
14. 45	14. 15	9. 11	·0966					
15. 13	12. 10	9. 25	·0949					
15. 27	13. 0	9. 33	·0958					
15. 37	10. 50	9. 37	·0950					
15. 54	10. 25	9. 48	·0961					
16. 0	12. 0		***					
	***	10. 16	·0955					
18. 57	9. 10	10. 27	·0966					
	***	10. 45	·0950					
21. 3	11. 45	10. 58	·0968					
23. 59	18. 50	11. 11	·0959					
		11. 26	·0972					
		11. 45	·0950					
		12. 8	·0961					
		12. 26	·0957					
		13. 17:	·0963					
		14. 18:	·0956					
		15. 3	·0969					
		15. 42	·0959					
			***					
		17. 45	·0958					
		18. 43	·0954					
		19. 35	·0943					
			***					
		23. 3	·0929					
		23. 59	·0938					
Sept. 27		Sept. 27		Sept. 27		Sept. 27		
0. 0	21. 18. 50	0. 0	·0938	0. 0	·00850	0. 0	58 ·2	58 ·9
0. 49	19. 45	2. 5	·0944	3. 20	·00666	1. 0	59 ·0	59 ·5
4. 42	15. 10	3. 6	·0940	6. 57	·00990	3. 0	61 ·0	61 ·5
7. 7	13. 30		***	8. 52	·01092	9. 0	62 ·0	62 ·2
	***	11. 5	·0959	17. 39	·01202	21. 0	58 ·3	59 ·8
17. 26	10. 15		***	23. 59	·01317			
20. 0	7. 40	14. 34	·0961					
21. 25	9. 10	14. 40	·0972					
23. 59	18. 40		***					
		14. 47	·0963					
			***					
		15. 52	·0962					
			***					
		16. 16	·0968					
			***					
		18. 45	·0962					
		21. 34	·0939					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
h m	° ′ ″
Sept. 28	
0. 0	21. 18. 40
0. 47	20. 50
2. 45	17. 15
3. 8	17. 30
3. 13	18. 0
3. 24	17. 30
3. 58	16. 20
13. 28	12. 30
13. 51	14. 0
14. 15	12. 40
17. 12	12. 20
20. 18	8. 40
22. 12	13. 20
23. 59	19. 30
Sept. 29	
0. 0	21. 19. 30
0. 35	20. 35
2. 22	18. 0
4. 40	13. 50
6. 27	12. 40
11. 48	13. 10
12. 27	11. 50
14. 5	13. 0
19. 12	10. 40
20. 19	8. 15
21. 20	13. 15
21. 28	12. 30
	***
22. 44	13. 35
	(†)
Sept. 30	
6. 19	21. 9. 12*
21. 0	6. 19*
Oct. 1	
	(†)
0. 45	21. 21. 30
0. 52	22. 15
1. 14	19. 45
1. 45	20. 20
1. 53	19. 15
2. 16	19. 30
2. 25	20. 50
2. 53	16. 40
3. 14	20. 50
3. 51	16. 0
4. 1	16. 20
4. 16	14. 10

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Sept. 27	
h m	
23. 7	·0936
23. 59	·0939
Sept. 28	
0. 0	·0939
1. 10	·0953
1. 25	·0951
2. 40	·0957
2. 53	·0961
3. 6	·0971
3. 17	·0965
3. 46	·0959
	***
7. 43	·0969
8. 0	·0965
	***
13. 17	·0967
14. 2	·0973
18. 17	·0971
21. 45	·0947
23. 6	·0945
23. 59	·0949
Sept. 29	
0. 0	·0949
	***
2. 10	·0961
4. 35	·0961
6. 46	·0971
	***
17. 57	·0973
	***
21. 46	·0945
22. 45	·0947
	(†)
Sept. 30	
6. 19	·0978*
21. 0	·0972*
Oct. 1	
	(†)
0. 37	·0952
0. 52	·0955
1. 7	·0951
	***
1. 45	·0959
	***
2. 15	·0953
2. 17	·0959
2. 46:	·0941
3. 17	·0966
3. 36	·0962
3. 47	·0947

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Sept. 28	
0. 0	·01317
2. 37	·01315
9. 54:	·01150
21. 5	·01623
23. 59	·01633
Sept. 29	
0. 0	·01633
1. 40	·01622
9. 45:	·01387
20. 10	·01620
23. 59	·01712
Sept. 30	
0. 0	·01712
10. 34:	·01508
21. 50	·01624
23. 59	·01657
Oct. 1	
0. 0	·01657
3. 11	·01618
6. 16	·01400
8. 45	·01262
12. 37	·01173
22. 29	·01543
23. 59	·01517

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
Sept. 28		
1. 0	59·3	60·7
3. 0	60·8	61·7
9. 0	59·8	61·5
21. 0	55·0	56·0
Sept. 29		
1. 0	57·3	57·9
3. 0	58·7	59·0
9. 0	58·0	59·0
21. 30	54·3	56·0
Sept. 30		
6. 19	57·0	58·4
21. 0	54·5	55·7
Oct. 1		
1. 0	56·3	57·2
3. 0	58·2	58·8
9. 0	59·5	60·0
21. 0	55·0	56·3

Greenwich Mean Solar Time.	Western Declination.
Oct. 1	
h m	° ′ ″
4. 52	21. 14. 55
5. 55	12. 0
6. 40	9. 50
7. 12	0. 50
7. 26	0. 30
7. 30	21. 1. 30
7. 41	20. 59. 50
8. 12	21. 6. 30
8. 42	20. 59. 20
9. 15	21. 5. 40
10. 11	20. 59. 20
10. 28	21. 1. 40
10. 45	8. 45
11. 11	8. 30
11. 44	10. 15
12. 7	12. 10
12. 39	10. 10
12. 58	8. 0
13. 7	9. 10
13. 30	7. 0
14. 21	9. 50
14. 55	8. 50
15. 15	9. 20
15. 24	10. 45
15. 39	9. 50
15. 54	11. 40
16. 15	10. 30
16. 27	13. 50
16. 37	13. 20
16. 53	14. 50
18. 30	10. 30
18. 45	11. 10
19. 11	10. 20
19. 45	11. 30
20. 0	9. 0
20. 12	9. 30
20. 30	8. 0
21. 21	12. 0
21. 41	11. 30
	***
22. 55	18. 10
	***
23. 14	17. 45
	***
23. 59	20. 50
Oct. 2	
0. 0	21. 20. 55
0. 15	23. 30
1. 7	22. 0
1. 13	21. 15
1. 54	22. 30
2. 43	21. 10
3. 5	18. 20
4. 37	12. 55
4. 53	10. 40
5. 21	9. 10
6. 13	11. 15

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Oct. 1	
h m	
4. 0	·0948
4. 10	·0937
5. 2	·0954
5. 15	·0955
6. 10:	·0967
7. 3	·0957
	***
8. 4	·0973
8. 25	·0951
8. 51	·0963
9. 45	·0945
	***
10. 27	·0949
11. 8	·0968
11. 23	·0964
11. 40	·0970
12. 26	·0962
13. 7	·0970
13. 22	·0965
13. 46	·0973
	***
14. 33	·0964
	***
15. 46	·0969
	***
16. 47:	·0962
	***
18. 0	·0970
19. 5	·0958
	***
20. 3	·0956
20. 47	·0943
21. 5	·0944
22. 4	·0935
23. 7	·0936
23. 59	·0947
Oct. 2	
0. 0	·0947
0. 9	·0944
0. 57	·0946
1. 25	·0936
1. 50	·0945
2. 17	·0936
2. 33	·0940
	***
2. 56	·0936
3. 40	·0951
4. 11	·0949

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Oct. 2	
0. 0	·01517
1. 15	·01510
2. 50	·01452
4. 9	·01691
7. 21	·01749
11. 28	·01738
17. 12	·02012
22. 11	·02265
23. 59	·02270

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
Oct. 2		
1. 0	58·3	58·8
3. 0	60·7	61·2
9. 0	61·0	62·0
21. 0	56·3	57·2

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

September 30. Owing to some inadvertance, the time-piece was not in connexion with the cylinder upon which the movements of the Declination and Horizontal Force Magnets are registered.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 2		Oct. 2						
h m	° ′ ″	h m		h m		h m	°	°
6. 42	21. 9. 40	4. 22	·0951					
7. 9	11. 10	4. 37	·0946					
7. 59	10. 40	4. 47	·0951					
8. 13	9. 0	5. 6	·0951					
	***	5. 47	·0963					
9. 16	11. 20	6. 36	·0957					
9. 45	9. 50	7. 3	·0956					
10. 9	10. 30	8. 15	·0964					
10. 32	10. 10		***					
11. 6	7. 45	10. 25	·0967					
11. 19	10. 0	10. 45	·0970					
11. 45	4. 30	11. 0	·0968					
12. 28	11. 50	11. 17	·0972					
12. 57	9. 10		***					
13. 38	11. 30	12. 7	·0963					
16. 51	11. 40	12. 50	·0969					
19. 12	8. 30	13. 7	·0967					
19. 26	9. 0	13. 50	·0971					
19. 50	8. 10	14. 33	·0968					
20. 8	8. 20	19. 0	·0969					
20. 19	9. 50	19. 33	·0957					
20. 51	11. 0		***					
21. 50	11. 15	20. 17	·0949					
22. 12	15. 0	20. 46	·0951					
22. 40	14. 0	21. 25	·0947					
22. 51	17. 45	21. 52	·0948					
23. 6	16. 30	22. 17	·0954					
23. 18	19. 15	22. 40	·0948					
23. 26	19. 0	22. 50	·0957					
23. 48	23. 40	23. 10	·0940					
23. 56	21. 15	23. 17	·0945					
23. 59	22. 0	23. 26	·0937					
		23. 45	·0937					
		23. 52	·0923					
		23. 59	·0924					
Oct. 3		Oct. 3		Oct. 3		Oct. 3		
0. 0	21. 22. 5	0. 0	·0925	0. 0	·02270	0. 0	58 ·3	59 ·6
0. 11	23. 45	0. 50	·0949		(†)	1. 0	60 ·0	60 ·7
0. 16	23. 30	1. 26	·0934	1. 0	·02262*	3. 0	63 ·0	63 ·0
0. 45	27. 0	1. 53	·0948	3. 0	·02218	6. 0	62 ·8	63 ·2
0. 57	26. 20		***	4. 58	·01786	9. 0	61 ·0	61 ·7
1. 10	23. 40	2. 32	·0943	11. 52	·01835	12. 0	60 ·5	61 ·3
1. 19	25. 30	2. 46	·0964	14. 29	·01970	18. 0	53 ·1	55 ·0
1. 30	23. 0	3. 0	·0900	21. 6	·02493	21. 0	52 ·2	54 ·8
1. 54	26. 15	3. 10	·0921	21. 57	·02618			
2. 0	24. 35	3. 16	·0917	22. 14	·02590			
2. 7	26. 25	3. 42	·0928	23. 43	·02573			
2. 16	25. 0		***		(†)			
2. 30	21. 0	4. 40	·0927					
2. 40	22. 15	5. 4	·0933					
2. 51	31. 30	5. 32	·0930					
3. 12	14. 20	5. 46	·0935					
3. 14	15. 15	6. 3	·0932					
3. 27	13. 40	7. 26	·0940					
4. 0	20. 0	7. 45	·0948					
4. 54	15. 0		***					
5. 33	13. 20	8. 33	·0942					
Oct. 3		Oct. 3						
h m	° ′ ″	h m		h m		h m	°	°
7. 24	21. 12. 25	8. 46	·0944					
8. 6	13. 30	9. 23	·0958					
	***	10. 46	·0950					
9. 26	9. 50	11. 3	·0947					
9. 40	7. 40	12. 6	·0955					
10. 26	10. 40	12. 15	·0951					
	***	17. 3	·0961					
12. 7	11. 50	19. 7	·0959					
13. 10	11. 15	19. 43	·0946					
14. 18	15. 30	20. 7	·0950					
15. 39	12. 10		***					
18. 45	10. 15	21. 33	·0942					
19. 27	11. 5		***					
20. 11	15. 40	23. 8	·0926					
20. 21	14. 40	23. 33:	·0931					
20. 30	15. 5	23. 47	·0925					
20. 49	14. 30	23. 59	·0928					
21. 10	17. 0							
21. 42	15. 0							
21. 56	16. 40							
22. 11	16. 30							
22. 45	18. 5							
22. 57	17. 20							
23. 22	20. 20							
23. 42	20. 0							
23. 59	24. 20							
Oct. 4		Oct. 4		Oct. 4		Oct. 4		
0. 0	21. 24. 20	0. 0	·0928		(†)	0. 0	54 ·0	56 ·0
0. 15	21. 30	0. 15	·0926	0. 22	·02590	1. 0	55 ·0	55 ·7
0. 52	18. 30	0. 36	·0940	1. 24	·02573	3. 0	57 ·8	57 ·7
	***		***	7. 42	·01920	9. 0	58 ·2	58 ·4
1. 51	20. 5	0. 54	·0936	10. 50	·01848	21. 0	53 ·2	54 ·6
	***		***	11. 58	·01859			
2. 45	18. 45	1. 50	·0941	14. 15	·01890			
	***		***	21. 10	·02304			
3. 13	16. 30	2. 46	·0932	23. 59	·02409			
3. 37	17. 20	3. 7	·0936					
3. 44	18. 50	3. 10	·0932					
3. 58	16. 30	3. 40	·0945					
4. 16	15. 15	4. 7	·0934					
4. 46	16. 30	4. 40	·0946					
5. 14	13. 10	5. 7:	·0935					
5. 39	12. 40	5. 40	·0946					
5. 49	14. 15	5. 52	·0940					
6. 13	10. 50	6. 36	·0952					
6. 24	12. 20	6. 45	·0915					
6. 39	10. 0	7. 6	·0953					
6. 44	21. 16. 0		***					
6. 58	20. 55. 10	7. 17	·0952					
7. 14	21. 1. 30		***					
7. 21	1. 0	8. 0	·0941					
7. 36	7. 0		***					
9. 31	7. 15	9. 7	·0939					
9. 44	5. 45	9. 23	·0944					
9. 54	7. 15	9. 32	·0941					
10. 13	4. 15	9. 45	·0942					
10. 40	5. 30	10. 2	·0935					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 4		Oct. 4						
h m	° ′ ″	h m		h m		h m	°	°
11. 4	21. 3. 20	10. 33	·0944					
11. 13	4. 30	10. 50	·0939					
11. 22	3. 40	11. 36	·0954					
11. 50	6. 45	12. 21:	·0946					
12. 15	3. 0	13. 0	·0955					
12. 41	5. 0		***					
13. 7	4. 0	13. 45	·0952					
13. 15	2. 50	14. 6	·0967					
13. 39	8. 0	14. 17	·0962					
13. 45	8. 10	14. 40	·0964					
13. 52	9. 30		***					
14. 26	2. 0	16. 4	·0959					
14. 57	2. 10	16. 33	·0963					
15. 41	7. 40		***					
	***	17. 40	·0954					
17. 45	12. 15	18. 17	·0964					
17. 58	15. 0		***					
18. 13	14. 55	18. 50	·0956					
18. 33	10. 0	19. 10	·0960					
18. 45	11. 0		***					
18. 57	9. 30	20. 13	·0950					
19. 17	11. 0	20. 38	·0940					
20. 5	8. 50	21. 16	·0941					
21. 28	9. 50	21. 33	·0947					
21. 42	12. 10	21. 52	·0939					
21. 57	12. 0	22. 10	·0941					
22. 21	14. 10	22. 33	·0932					
22. 37	13. 30	23. 59	·0935					
23. 59	19. 0							
Oct. 5		Oct. 5		Oct. 5		Oct. 5		
0. 0	21. 19. 0	0. 0	·0935	0. 0	·02409	1. 0	56·0	56·8
0. 29	20. 40	0. 25	·0940	0. 43	·02418	3. 0	58·2	58·6
0. 45	19. 25	0. 37:	·0935	3. 0	·02308	9. 0	60·5	61·5
1. 56	17. 40	1. 24	·0952	6. 11	·01888	21. 0	57·3	58·6
2. 15	20. 5	1. 47	·0952	7. 45	·01753			
2. 29	17. 30	2. 0	·0957	16. 9	·01822			
2. 39	18. 30	2. 7	·0953	23. 59	·02089			
2. 50	15. 50	2. 16	·0957					
3. 37	14. 45	2. 20	·0947					
4. 0	15. 0	2. 36	·0954					
4. 45	13. 40	2. 46	·0945					
9. 15	10. 0		***					
13. 30	11. 20	3. 47	·0943					
14. 54	10. 40	5. 30	·0945					
15. 50	11. 0	18. 17	·0966					
16. 12	12. 30	20. 5	·0962					
17. 45	10. 50	22. 48	·0942					
18. 27	11. 10	23. 59	·0936					
20. 54	7. 35							
21. 36	8. 0							
23. 56	15. 10							
23. 59	14. 40							
Oct. 6		Oct. 6		Oct. 6		Oct. 6		
0. 0	21. 14. 35	0. 0	·0936	0. 0	·02089	1. 0	60·0	60·7
0. 5	14. 15	7. 33	·0961	1. 36	·02070	3. 0	62·0	62·9
0. 13	15. 35	11. 16	·0960	4. 28	·01800	9. 0	63·8	64·3
2. 22	15. 50	11. 40	·0965	5. 25	·01812	22. 30	61·0	61·8

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 6		Oct. 6		Oct. 6				
h m	° ′ ″	h m		h m		h m	°	°
7. 55	21. 10. 40	17. 33	·0967	5. 37	·01848			
11. 28	10. 20	21. 10	·0946		·01972			
12. 0	9. 15		***	12. 0:	·01882			
12. 44	10. 15	23. 0	·0943	20. 5	·02072			
16. 30	10. 10	23. 59	·0947	23. 59	·02100			
16. 44	9. 20							
16. 59	10. 50							
17. 54	10. 15							
20. 30	7. 30							
	***							
21. 49	10. 0							
23. 55	16. 30							
23. 59	16. 20							
Oct. 7		Oct. 7		Oct. 7		Oct. 7		
0. 0	21. 16. 20	0. 0	·0947	0. 0	·02100	10. 15	62·0	63·0
1. 42	18. 50		***	4. 49	·02096	21. 0	57·0	57·2
2. 20:	17. 30	2. 46	·0951	11. 26:	·01992			
2. 56	18. 25	3. 10	·0957	22. 50	·02456			
6. 0	13. 40		***	23. 59	·02481			
15. 54	11. 45	14. 36	·0969					
16. 6	12. 30		***					
17. 37	11. 0	18. 45	·0970					
17. 44	11. 30		***					
18. 41	9. 55	22. 46	·0941					
19. 9	10. 40	23. 59	·0943					
20. 12	7. 20							
21. 10	13. 0							
21. 24	11. 0							
23. 45	18. 0							
23. 59	17. 40							
Oct. 8		Oct. 8		Oct. 8		Oct. 8		
0. 0	21. 17. 40	0. 0	·0943	0. 0	·02481	1. 0	58·5	58·3
1. 5	19. 0		***	1. 40	·02470	3. 0	59·3	59·2
3. 12	17. 30	1. 36	·0944	3. 58	·02149	9. 0	55·3	57·5
	***	1. 50	·0938		·02192	21. 0	49·7	51·0
5. 57	13. 0	2. 46	·0948	5. 9	·02129			
	***	3. 30	·0944	7. 0	·02100			
10. 52	11. 30	4. 10	·0948		·02154			
11. 13	9. 45	4. 46	·0954	9. 25:	·02252			
	***	5. 24	·0961	13. 14	·02580			
11. 45	11. 15		***	21. 58	·02531			
12. 27	9. 50	9. 36	·0974	23. 59	·02500			
12. 42	11. 20	9. 50	·0976					
13. 43	3. 10		***					
13. 50	3. 30	10. 43	·0975					
14. 11	0. 30	10. 56	·0977					
14. 14	0. 15		***					
14. 54	6. 20	11. 20	·0969					
15. 10	4. 0	11. 53:	·0979					
15. 15	8. 0	12. 13	·0975					
15. 44	5. 45	12. 45	·0987					
15. 52	7. 0	12. 48	·0985					
16. 5	5. 30	13. 7	·0992					
16. 21	8. 0	13. 20	·0981					
16. 30	7. 40	13. 33	·0988					
16. 43	9. 0	13. 53	·0980					
18. 0	9. 50	14. 3	·0984					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 8		Oct. 8						
h m	° ′ ″	h m		h m		h m	°	°
18. 30	21. 12. 0	14. 15	·0970					
18. 57	12. 0	14. 33	·0982					
19. 43	8. 30	14. 36	·0971					
19. 47	7. 0	15. 6	·0977 ***					
20. 0	9. 30	15. 46	·0981					
20. 22	9. 0	16. 7	·0976					
20. 30	9. 40	16. 16	·0979					
20. 59	8. 10	16. 24	·0974					
21. 13	10. 30	17. 10	·0977					
21. 39	10. 30	17. 46	·0977 ***					
22. 40	18. 0	18. 33	·0974 ***					
22. 57	15. 30	20. 2	·0979 ***					
23. 45	16. 30	20. 50	·0971					
23. 56	18. 0	21. 13	·0973					
23. 59	17. 5	21. 46	·0959					
		22. 3	·0964 ***					
		22. 35	·0964					
		23. 7	·0952 ***					
		25. 59	·0954					
Oct. 9		Oct. 9		Oct. 9		Oct. 9		
0. 0	21. 17. 0	0. 0	·0954	0. 0	·02500	1. 0	51·8	52·5
0. 6	15. 50	1. 2	·0954	1. 40	·02501	3. 0	53·3	54·2
1. 4	21. 0	1. 12	·0960	9. 39:	·02013	9. 0	52·0	54·5
1. 10	18. 30	2. 13	·0952 ***	19. 7	·02572	21. 0	46·7	48·0
1. 46	21. 20	3. 24	·0957	23. 54	{·02486 ·02400			
2. 7	18. 30 ***	3. 58	·0965	23. 59	·02395			
3. 51	16. 50	4. 17	·0960					
4. 28	14. 20	4. 53	·0966					
5. 37	14. 50	5. 17	·0961					
6. 28	7. 20	5. 45	·0965					
7. 12	13. 40	5. 52	·0959					
9. 43	10. 0	6. 6	·0961					
9. 59	11. 30	6. 17	·0952					
12. 54	10. 30	6. 46	·0963 ***					
14. 34	12. 50	7. 30	·0963 ***					
15. 29	10. 30	8. 45	·0971 ***					
16. 15	14. 30	15. 13	·0982 ***					
16. 59	12. 10	15. 48	·0976 ***					
17. 27	12. 40	17. 7	·0988					
18. 55	11. 0	18. 56	·0988					
19. 52	7. 40	22. 33	·0970 ***					
20. 41	7. 30 ***	23. 7	·0969 ***					
21. 57	9. 45	23. 50	·0975					
23. 0	14. 50	23. 59	·0970					
23. 10	13. 45							
23. 52	17. 20							
23. 57	16. 40							
23. 59	16. 55							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 10		Oct. 10		Oct. 10		Oct. 10		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 17. 0	0. 0	·0970	0. 0	·02395	0. 0	48·1	49·2
0. 13	16. 30	0. 37:	·0978	2. 54	·02331	1. 0	49·0	50·1
0. 39	18. 0	1. 25	·0964	5. 26	·02309	3. 0	50·6	51·0
1. 0	19. 10	1. 46	·0970 ***	11. 30	·01959	6. 0	52·2	54·0
1. 37	16. 15	4. 7	·0978	17. 2	·01600	9. 0	53·8	54·5
1. 56	16. 50	4. 33	·0971	23. 59	·01610	12. 0	54·5	55·5
2. 41	15. 45	5. 0	·0981			18. 0	56·0	57·0
2. 55	16. 55	5. 8	·0976			21. 0	55·2	56·5
4. 27	13. 30	5. 30	·0984 ***					
4. 42	12. 15	9. 47	·0986 ***					
4. 58	12. 10	10. 47	·0981 ***					
5. 20	7. 10	19. 30	·0976					
6. 0	11. 20	20. 3	·0969 ***					
6. 19	11. 0	22. 15	·0964					
6. 42	12. 15	22. 45	·0956					
11. 23	9. 50	23. 59	·0957					
11. 48	10. 45							
16. 15	9. 20							
16. 39	10. 5							
17. 22	8. 40							
18. 6	9. 30							
19. 26	8. 50							
19. 38	10. 0 ***							
20. 51	9. 20							
21. 11	8. 10							
21. 43	11. 0							
21. 54	10. 30							
22. 29	12. 55							
22. 40	12. 30							
23. 59	17. 20							
Oct. 11		Oct. 11		Oct. 11		Oct. 11		
0. 0	21. 17. 20	0. 0	·0957	0. 0	·01610	0. 0	55·5	56·4
0. 15	18. 15	1. 40	·0963	5. 30	·01564	1. 0	55·7	56·2
1. 43	19. 10	2. 20	·0961	10. 5	·01709	3. 0	56·0	56·5
4. 17	13. 40	3. 17	·0962	15. 30	·02109	9. 8	51·7	53·7
8. 40	13. 20	7. 3	·0975	19. 42	·02530	21. 0	42·5	45·3
9. 14:	8. 30	7. 32	·0972	21. 32	·02517			
10. 23	12. 20	8. 0	·0977	23. 59	·02341			
11. 37	10. 55	8. 35	·0976					
12. 13	12. 50	9. 32	·0982					
12. 42	10. 25	9. 43	·0978					
13. 56	12. 30	9. 50	·0980					
14. 41	18. 45	10. 7	·0976					
15. 54	11. 45	10. 45	·0982 ***					
18. 48	11. 20	11. 46	·0978					
20. 42	7. 30	12. 25	·0984					
22. 46	16. 10	13. 58	·0977					
22. 57	16. 5	15. 17	·0986					
23. 50	20. 20	16. 20	·0989					
23. 59	19. 15	17. 30	·0985					
		18. 0	·0988 ***					
		21. 40	·0981 ***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Oct. 11						
h m	° ′ ″	h m		h m		h m	°	°
		23. 17	·0968					
			***					
		23. 59	·0966					
Oct. 12		Oct. 12		Oct. 12		Oct. 12		
0. 0	21. 19. 10	0. 0	·0966	0. 0	·02341	1. 0	45 ·7	47 ·1
0. 37	17. 20	1. 3	·0970	1. 37	·02310	3. 0	48 ·3	49 ·2
1. 1	20. 30	2. 0	·0974	10. 36:	·01794	9. 0	49 ·5	50 ·0
1. 30	17. 0	2. 17	·0969	18. 36	·01953	21. 0	49 ·0	50 ·3
2. 7	20. 30	4. 3	·0970	23. 59	·01847			
2. 30	17. 20	5. 20	·0977					
2. 43	18. 10	5. 36	·0975					
3. 9	16. 10	6. 17	·0979					
3. 16	16. 30		***					
4. 29	13. 30	8. 15	·0974					
5. 41	11. 30		***					
7. 54	11. 30	10. 45	·0979					
8. 1	10. 50	11. 17:	·0976					
8. 13	11. 50	12. 6	·0989					
8. 28	10. 30	12. 33	·0984					
9. 27	10. 0	12. 52	·0987					
10. 22	10. 45	13. 36	·0981					
10. 46	9. 0		***					
11. 11	9. 50	16. 42	·0993					
11. 21	9. 10		***					
11. 43	11. 0	18. 33	·0993					
12. 12	9. 10	22. 40	·0967					
12. 15	10. 0	23. 16	·0967					
12. 40	8. 10	23. 32	·0964					
13. 11	7. 50	23. 59	·0970					
14. 39	12. 0							
15. 56	10. 40							
16. 4	11. 30							
17. 7	9. 10							
17. 15	10. 0							
17. 42	8. 15							
17. 54	8. 30							
18. 6	8. 10							
18. 50	8. 30							
19. 0	7. 25							
20. 22	6. 50							
20. 57	7. 10							
22. 14	12. 30							
23. 15	19. 30							
23. 39	18. 40							
23. 52	21. 10							
23. 59	21. 0							
Oct. 13		Oct. 13		Oct. 13		Oct. 13		
0. 0	21. 21. 0	0. 0	·0970	0. 0	·01847	1. 0	52 ·0	52 ·2
0. 19	22. 30	0. 45	·0968	2. 12	·01756	3. 0	54 ·0	54 ·0
1. 27	22. 30	3. 10	·0969	6. 43	·01430	9. 0	55 ·0	56 ·0
1. 59	20. 15	4. 46	·0974	8. 49	·01558	22. 25	50 ·0	52 ·0
2. 28	21. 0	5. 10:	·0970	15. 10:	·01570			
2. 50	19. 0	5. 36	·0980	20. 58	·01823			
3. 16	18. 50	5. 45	·0977	23. 40	·01908			
4. 0	15. 10	7. 15	·0982	23. 59	·01896			
4. 22	15. 20	7. 45	·0977					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 13		Oct. 13						
h m	° ′ ″	h m		h m		h m	°	°
4. 45	21. 14. 30	10. 36	·0982					
5. 28	5. 50	10. 45	·0998					
5. 49	7. 20	11. 10	·0997					
5. 54	7. 10	11. 32	·0990					
6. 18	10. 20	11. 36	·0992					
7. 28	11. 10	13. 46	·0986					
8. 2	10. 0	14. 5	·0978					
9. 43	12. 0	14. 36	·0986					
10. 10	11. 10		***					
10. 54	12. 15	19. 3	·0986					
11. 49	7. 50	21. 57	·0962					
12. 12	8. 50	22. 10	·0964					
12. 50	7. 30	22. 46	·0961					
13. 56	10. 15	23. 3	·0964					
15. 17	10. 40	23. 12	·0962					
15. 45	9. 10	23. 59	·0965					
16. 13	11. 0							
	***							
17. 24	10. 25							
17. 42	11. 30							
17. 54	10. 30							
18. 11	10. 45							
20. 12	7. 0							
20. 48	6. 55							
22. 57	18. 45							
23. 59	21. 0							
Oct. 14		Oct. 14		Oct. 14		Oct. 14		
0. 0	21. 21. 0	0. 0	·0965	0. 0	·01896	10. 15	54 ·0	55 ·5
0. 27	20. 30	3. 7	·0967	2. 0:	·01878	21. 0	49 ·7	51 ·0
0. 39	21. 10	3. 50	·0971	6. 22	·01562			
2. 12	19. 45	4. 15	·0969	12. 13	·01610			
4. 30	12. 35	4. 58	·0973	18. 4	·01947			
7. 56	12. 0	5. 46	·0972	23. 20	·02320			
8. 20	10. 40	6. 20	·0977	23. 59	·02317			
9. 40	11. 30	8. 21	·0977					
9. 45	10. 40		***					
9. 55	11. 20	8. 56	·0981					
11. 14	11. 30	9. 4	·0986					
11. 40	12. 50	9. 30	·0979					
12. 40	11. 20		***					
13. 30	13. 10	11. 26	·0986					
	***	11. 45	·0994					
17. 33	12. 10	12. 7	·0998					
17. 47	11. 15	12. 42	·0986					
18. 51	10. 50	13. 8	·0981					
19. 28	9. 30		***					
19. 51	7. 40	14. 33	·0984					
20. 9	8. 30	14. 47	·0988					
20. 19	7. 30	15. 6	·0984					
20. 45	7. 20	15. 20	·0989					
20. 54	8. 10	15. 33	·0986					
21. 2	7. 10		***					
23. 50	19. 0	18. 16	·0992					
23. 59	18. 45		***					
		19. 20	·0988					
			***					
		21. 3	·0971					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Oct. 14						
h m	° ′ ″	h m		h m		h m	°	°
		22. 15	·0968					
		23. 59	·0971					
Oct. 15		Oct. 15		Oct. 15		Oct. 15		
0. 0	21. 18. 45	0. 0	·0971	0. 0	·02317	1. 0	53·0	53·8
0. 5	18. 30	0. 15	·0969 ***	0. 57	·02312	3. 0	55·7	55·5
0. 40	19. 45			3. 48	·02190	9. 0	59·7	59·3
0. 57	19. 30	2. 47	·0979	8. 12	·01769	21. 0	59·7	59·7
1. 9	20. 30	3. 2	·0976	10. 21	·01625			
1. 45	17. 35	3. 46	·0980	20. 51	·01769			
4. 30	13. 50	3. 51	·0976	23. 59	·01686			
4. 42	14. 50	4. 6	·0979					
4. 50	14. 10	4. 30	·0978					
7. 13	13. 10	4. 38	·0985 ***					
7. 54	13. 45							
8. 35	10. 45	5. 33	·0983					
8. 45	13. 40	6. 40	·0991 ***					
9. 16	11. 30							
10. 11	11. 10	8. 10	·0974					
11. 30	12. 10	8. 33	·0979					
11. 50	11. 10	8. 47	·0969 ***					
15. 36	11. 30							
15. 41	10. 40	10. 33	·0981 ***					
15. 44	12. 15							
18. 41	10. 30	18. 4	·0983 ***					
18. 48	9. 10							
18. 58	9. 0	18. 36	·0978 ***					
19. 8	10. 30							
19. 30	8. 10	19. 0	·0981 ***					
19. 42	8. 15							
19. 54	6. 50	22. 17	·0946					
20. 0	10. 30	23. 17	·0946					
20. 29	8. 0	23. 59	·0958					
20. 43	9. 30							
21. 56	12. 0							
23. 30	20. 0							
23. 43	19. 30							
23. 59	21. 0							
Oct. 16		Oct. 16		Oct. 16		Oct. 16		
0. 0	21. 21. 0	0. 0	·0958	0. 0	·01686	1. 0	60·0	60·0
0. 40	21. 10	0. 35	·0957	1. 26	·01640	3. 0	60·0	60·0
0. 50	22. 25	0. 46	·0962	7. 10	·01691	9. 0	57·0	57·2
1. 6	21. 40	1. 2	·0959	10. 56	·01863	21. 10	52·0	53·0
1. 24	22. 30	1. 20	·0965	16. 50	·02302			
1. 44	21. 30	1. 45	·0954	21. 46	·02480			
1. 52	19. 30	2. 3	·0969	23. 59	·02510			
2. 9	21. 45	2. 15	·0967					
4. 27	16. 15	3. 46	·0973					
4. 36	17. 30	3. 52	·0976					
4. 43	16. 40	4. 16	·0975					
5. 10	16. 0	4. 33	·0981					
5. 51	16. 40	5. 17	·0978					
6. 41	15. 35	5. 46	·0984					
7. 47	15. 20	6. 0	·0981					
8. 26	13. 45	6. 14	·0986 ***					
8. 43	12. 0							
8. 59	12. 0	7. 25	·0982					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 16		Oct. 16						
h m	° ′ ″	h m		h m		h m	°	°
9. 15	21. 10. 20	7. 46	·0992					
9. 51	11. 40	7. 53	·0984					
10. 35	10. 50	8. 16:	·0987					
10. 52	12. 40	8. 36	·0980					
11. 5	11. 0 ***	9. 16	·0990					
		9. 28	·0983					
12. 10	9. 40	9. 50:	·0985					
13. 11	13. 40	10. 16	·0978 ***					
13. 26	11. 15							
13. 30	11. 20	10. 45	·0980					
14. 9	6. 40	11. 0	·0976					
14. 54	10. 10	11. 16	·0984					
15. 26	10. 0	11. 43	·0980					
15. 48	11. 30	11. 52	·0983					
16. 0	10. 20	12. 3	·0981					
16. 12	10. 45	12. 15	·0986					
16. 36	8. 50	12. 46:	·0978					
17. 10	8. 0	13. 30	·0995 ***					
17. 26	8. 45							
17. 41	10. 0	14. 36	·0987 ***					
18. 32	9. 0 ***							
		17. 6	·0997 ***					
18. 45	11. 0 ***							
		19. 25	·0986					
20. 12	10. 0	21. 12	·0962					
21. 25	14. 40 (†)	21. 45	·0960 ***					
		23. 0	·0950 ***					
		23. 59	·0960					
Oct. 17		Oct. 17		Oct. 17		Oct. 17		
	(†)	0. 0	·0960	0. 0	·02510	0. 0	54·5	54·7
1. 0	21. 27. 46*	0. 56	·0952	0. 39	·02512	1. 0	56·0	55·9
1. 13	26. 45	1. 17	·0956	1. 11	·02531	3. 0	57·5	57·5
1. 54	26. 0	1. 40	·0950	1. 56	·02450	6. 0	58·6	58·5
2. 9	23. 20	3. 20	·0961 ***	10. 42:	·01717	9. 0	57·9	57·8
2. 38	20. 40			19. 15	·02170	12. 0	57·0	57·0
3. 28	20. 15	3. 42	·0956	23. 59	·02298	18. 0	53·0	54·0
4. 0	17. 20	4. 10	·0961 ***			21. 0	53·0	54·0
5. 8	14. 40							
6. 15	13. 30	5. 4	·0959 ***					
6. 27	12. 20							
6. 59	12. 10	6. 18	·0969					
7. 50	12. 0	6. 33	·0967 ***					
8. 6	11. 15							
8. 15	11. 50	7. 26	·0969					
8. 40	5. 0	7. 47	·0965 ***					
8. 44	6. 0							
9. 3	5. 30	8. 46	·0969					
9. 30	7. 0	9. 15:	·0979					
10. 11	14. 20	9. 34	·0970 ***					
10. 52	7. 0							
11. 50	10. 0	10. 16	·0968 ***					
13. 30	11. 40							
14. 0	10. 0	17. 5	·0987 ***					
15. 43	13. 5							
17. 50	11. 40	18. 46	·0986 ***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
Oct. 17	
h m	° ′ ″
20. 11	21. 7. 20
20. 54	8. 30
21. 46	12. 20
22. 15	12. 15
23. 27	17. 30
23. 42	17. 20
23. 47	18. 15
23. 59	18. 55
Oct. 18	
0. 0	21. 18. 55
0. 44	19. 10
1. 13	18. 15
1. 30	18. 55
3. 43	15. 30
3. 51	16. 10
4. 10	14. 55
6. 11	13. 30
11. 29	11. 50
14. 57	13. 40
19. 0	13. 0
	***
20. 43	10. 15
21. 58	12. 30
22. 10	13. 55
22. 14	12. 0
23. 21	19. 55
23. 45	20. 30
23. 59	19. 30
Oct. 19	
0. 0	21. 19. 30
0. 14	19. 5
0. 31	20. 20
4. 22	15. 20
6. 44	15. 0
10. 56	12. 0
18. 36	13. 15
20. 7	9. 30
	***
21. 33	11. 30
	***
23. 42	17. 30
23. 56	20. 30
23. 59	19. 30
Oct. 20	
0. 0	21. 19. 30
0. 12	20. 10
0. 21	18. 0
0. 43	17. 30
1. 9	20. 40
2. 54	20. 0
3. 44	21. 16. 30
9. 8	13. 50
9. 52	7. 45
10. 51	11. 30
14. 49	12. 20
15. 15	10. 50
15. 54	15. 50
16. 14	14. 30
16. 44	10. 5
19. 5	11. 30
20. 26	8. 10
21. 24	8. 0
22. 7	11. 20
22. 14	10. 50
22. 49	14. 0
22. 58	13. 30
23. 59	16. 40
Oct. 21	
0. 0	21. 16. 40
1. 13	18. 10
1. 26	17. 25
2. 30	17. 0
	(†)
5. 52	14. 0
7. 29	13. 0
17. 13	13. 30
19. 12	11. 50
20. 7	9. 15
21. 0	12. 20
	(†)
23. 46	18. 30
23. 59	18. 40
Oct. 22	
0. 0	21. 18. 40
0. 21	20. 30
1. 26	21. 30
2. 56	19. 0
4. 15	14. 30
6. 11	13. 30
11. 38	13. 25
18. 54	11. 15
20. 21	7. 40
21. 44	9. 50
23. 5	17. 25
23. 14	21. 0
23. 27	16. 45

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Oct. 17	
h m	
20. 27	·0974
21. 3	·0964
21. 45	·0963
	***
22. 6	·0956
	***
23. 59	·0960
Oct. 18	
0. 0	·0960
0. 47	·0962
1. 16	·0969
	***
4. 58	·0980
18. 6	·0986
21. 37	·0973
	***
22. 2	·0975
22. 8	·0966
	***
23. 47	·0960
23. 59	·0962
Oct. 19	
0. 0	·0962
0. 18	·0965
	***
2. 50	·0973
	***
3. 46	·0971
	***
5. 55	·0982
6. 17	·0978
	***
9. 4	·0975
11. 9	·0977
12. 5	·0973
15. 36	·0975
18. 38:	·0981
21. 35	·0967
	***
22. 17	·0957
	***
23. 59	·0958
Oct. 20	
0. 0	·0958
0. 17	·0962
0. 33	·0951
1. 2	·0963
1. 30	·0958
	***
4. 39	·0970
	***
5. 17	·0966
5. 53	·0974
6. 10	·0972
	***
6. 47	·0978
7. 3	·0976
	***
8. 18	·0982
8. 37	·0979
9. 5	·0983
	***
10. 17	·0973
11. 27	·0979
	***
15. 12	·0984
15. 25	·0981
16. 17	·0991
	***
17. 46	·0987
18. 19	·0992
19. 32	·0988
	***
21. 47	·0972
21. 52	·0975
22. 13	·0967
	***
23. 59	·0974
Oct. 21	
0. 0	·0974
1. 48	·0981
6. 20	·0988
	***
12. 45	·0987
15. 10	·0989
18. 11:	·0997
20. 37	·0987
22. 36	·0973
	***
23. 18	·0969
23. 25	·0973
23. 49	·0961
23. 59	·0961
Oct. 22	
0. 0	·0961
	***
0. 33	·0964
1. 12	·0958
	***
3. 57	·0967
4. 15	·0966
	***
12. 18	·0984
13. 47	·0984
18. 43	·0989
19. 14	·0987
	***

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Oct. 18	
0. 0	·02298
2. 40	·02250
11. 56:	·01809
22. 43	·02058
23. 59	·02069
Oct. 19	
0. 0	·02069
1. 4	·02065
2. 56	{ ·01960 ·01877
7. 51	{ ·01620 ·01645
17. 37	·01685
22. 28	·02033
23. 59	·02060
Oct. 20	
0. 0	·02060
1. 30	·02044
7. 42:	·01656
16. 15	·02049
23. 59	·02724
Oct. 21	
0. 0	·02724
2. 13	·02730
12. 52:	·02556
21. 38	·02784
23. 59	·02745
Oct. 22	
0. 0	·02745
1. 21	·02680
8. 20:	·02820
14. 15	·01936
20. 11	·02030
23. 59	·02028

Greenwich Mean Solar Time.	Readings of Thermometers. of H. F. Magnet.	Readings of Thermometers. of V. F. Magnet.
h m	°	°
Oct. 18		
0. 0	54 ·5	55 ·0
1. 0	55 ·0	55 ·3
3. 0	56 ·7	56 ·6
9. 0	58 ·2	58 ·0
21. 0	55 ·0	56 ·0
Oct. 19		
1. 0	57 ·0	57 ·2
3. 0	59 ·0	59 ·0
9. 0	57 ·0	57 ·2
21. 0	55 ·6	56 ·2
Oct. 20		
1. 0	57 ·0	57 ·2
3. 0	58 ·4	58 ·5
9. 0	56 ·8	57 ·4
22. 22	49 ·0	50 ·8
Oct. 21		
6. 7	53 ·0	53 ·[illegible]
21. 0	49 ·8	51 ·[illegible]
Oct. 22		
1. 0	54 ·0	55 ·0
3. 0	57 ·8	57 ·5
9. 0	57 ·0	58 ·[illegible]
21. 0	56 ·3	57 ·2

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 22		Oct. 22						
h m	° ′ ″	h m		h m		h m	°	°
23. 29	21. 18. 20	23. 32	·0954					
23. 39	16. 20	23. 35	·0965					
23. 59	17. 25	23. 44	·0947					
		23. 48	·0955					
		23. 53	·0946					
		23. 59	·0948					
Oct. 23		Oct. 23		Oct. 23		Oct. 23		
0. 0	21. 17. 25	0. 0	·0949	0. 0	·02028	1. 0	59 ·7	59 ·6
2. 7	19. 45		***	5. 0	·01685	3. 0	60 ·7	60 ·8
3. 58	16. 40	1. 12	·0966	15. 45	·01718	9. 30	61 ·5	62 ·0
6. 12	14. 5		***	23. 59	·01862	21. 0	59 ·0	59 ·5
10. 42	13. 15	3. 15	·0963					
12. 0	13. 40		***					
18. 18	12. 40	10. 13	·0977					
21. 21	10. 0		***					
23. 17	18. 0	11. 12	·0973					
23. 59	20. 0		***					
		14. 25	·0975					
		18. 22	·0977					
		20. 15	·0970					
		21. 45	·0959					
		22. 56	·0955					
		23. 59	·0958					
Oct. 24		Oct. 24		Oct. 24		Oct. 24		
0. 0	21. 20. 0	0. 0	·0958	0. 0	·01862	0. 0	59 ·2	59 ·9
0. 23	21. 10		***	1. 41	·01884	1. 0	60 ·6	60 ·5
2. 3	19. 50	3. 7	·0971	4. 40	·01686	3. 0	62 ·3	62 ·2
2. 45	18. 0	3. 33	·0966	4. 54	⎧ ·01710	6. 0	62 ·0	61 ·8
2. 59	18. 30		***		⎩ ·01864	9. 10	61 ·3	62 ·2
3. 30	17. 0	4. 47	·0973	7. 49	·01788	12. 0	60 ·9	61 ·7
4. 37	16. 0		***	14. 10	·01918	18. 0	59 ·0	59 ·8
6. 33	16. 0	5. 46	·0974	20. 4	·02130	21. 0	59 ·3	60 ·2
6. 52	13. 50	6. 17	·0970	23. 59	·02103			
7. 21	14. 0		***					
7. 56	11. 45	7. 18	·0973					
8. 41	15. 10	8. 17;	·0964					
9. 17	13. 40	9. 30	·0972					
9. 40	14. 30		***					
12. 30	14. 20	11. 7	·0971					
12. 54	16. 15	12. 3	·0974					
13. 57	8. 15	12. 23	·0975					
15. 9	14. 0	12. 46	·0981					
17. 45	12. 10	13. 46	·0983					
18. 9	13. 10	14. 8	·0975					
19. 15	11. 0	14. 37	·0970					
20. 28	11. 10		***					
21. 30	15. 30	17. 45	·0975					
21. 44	15. 20	20. 11	·0965					
21. 52	17. 10	20. 45	·0956					
22. 21	17. 0	21. 50	·0956					
23. 3	19. 0	22. 3	·0948					
23. 13	18. 10		***					
23. 59	21. 15	23. 59	·0956					
Oct. 25		Oct. 25		Oct. 25		Oct. 25		
0. 0	21. 21. 15	0. 0	·0956	0. 0	·02103	0. 0	60 ·3	61 ·2
2. 0	21. 20	3. 0	·0967	1. 33	·02089	1. 0	60 ·9	61 ·6
5. 25	14. 55		***	5. 59	·01780	3. 0	62 ·3	62 ·7

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 25		Oct. 25		Oct. 25		Oct. 25		
h m	° ′ ″	h m		h m		h m	°	°
19. 10	21. 11. 45	9. 2	·0987	8. 31	⎧ ·01712	9. 0	61 ·0	61 ·5
20. 54	9. 0		***		⎩ ·01958	21. 6	59 ·6	60 ·0
21. 51	10. 45	16. 7	·0989	10. 52	·01955			
23. 20	18. 45	18. 18	·0984	17. 20	·02112			
23. 59	20. 45	21. 35	·0963	23. 59	·02316			
		23. 59	·0961					
Oct. 26		Oct. 26		Oct. 26		Oct. 26		
0. 0	21. 20. 45	0. 0	·0961	0. 0	·02316	1. 0	61 ·8	61 ·8
1. 25	23. 30	0. 36	·0959	5. 20	·02051	3. 0	62 ·7	62 ·5
1. 41	21. 40	0. 45	·0957	7. 31	·01991	9. 0	61 ·0	61 ·2
1. 52	24. 30	0. 58	·0960	13. 48	·02132	21. 0	56 ·5	58 ·0
2. 2	22. 10	1. 3	·0959	23. 59	·02572			
2. 17	23. 0	1. 18	·0962					
5. 0	16. 30	1. 33	·0957					
8. 26	14. 20	1. 42	·0958					
10. 27	14. 45	1. 48	·0967					
10. 46	12. 20	2. 6	·0960					
11. 2	12. 30		***					
11. 21	14. 30	2. 47	·0956					
11. 55	6. 50		***					
12. 45	13. 15	3. 46	·0956					
13. 30	12. 45		***					
13. 51	14. 0	6. 25	·0973					
15. 28	13. 40		***					
15. 45	14. 30	9. 23	·0978					
17. 4	13. 0		***					
18. 12	13. 50	10. 32	·0977					
20. 21	11. 30	10. 47	·0984					
20. 54	14. 0	11. 18	·0975					
21. 11	14. 0	12. 3;	·0986					
21. 27	15. 5	12. 40	·0973					
21. 36	13. 30		***					
22. 13	17. 15	13. 40	·0979					
22. 25	16. 45	14. 8	·0977					
22. 39	18. 30	16. 11	·0983					
23. 12	19. 0	16. 33	·0981					
23. 27	17. 10	17. 7	·0986					
23. 59	21. 20		***					
		19. 33	·0986					
		20. 8	·0981					
			***					
		20. 46	·0984					
		21. 28	·0976					
		21. 41	·0978					
		21. 45	·0983					
		21. 56	·0975					
		22. 6	·0978					
		22. 17	·0971					
		22. 33	·0975					
		22. 47	·0966					
			***					
		23. 30	·0961					
		23. 59	·0967					
Oct. 27		Oct. 27		Oct. 27		Oct. 27		
0. 0	21. 21. 20	0. 0	·0967	0. 0	·02572	1. 0	59 ·3	59 ·2
0. 24	23. 40		***	2. 6	·02520	3. 0	61 ·8	61 ·1

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 27		Oct. 27		Oct. 27		Oct. 27		
h m	° ′ ″	h m		h m		h m	°	
0. 50	21. 21. 20	1. 47	·0960	4. 42	·02322	9. 0	60 ·4	60 ·8
1. 7	22. 45	1. 52	·0961	8. 15	·02151	22. 15	58 ·2	58 ·6
1. 19	20. 45	2. 10	·0955	10. 38	·02113			
2. 6	23. 30		***	11. 11	·02130			
2. 21	20. 40	2. 40	·0967	12. 0	·02091			
2. 36	20. 0	2. 52	·0964	14. 40	·02169			
2. 42	21. 0		***	15. 14	·02144			
3. 0	18. 45	4. 0	·0971	20. 43	·02310			
5. 37	15. 0	4. 17	·0966	23. 59	·02343			
6. 54	14. 10		***					
7. 42	0. 15	7. 20	·0978					
8. 6	6. 10	7. 46	·1001					
8. 28	4. 20	8. 10	·0979					
8. 54	9. 30	8. 46	·0965					
9. 13	6. 20	9. 37	·0960					
10. 7	10. 30	10. 16	·0970					
10. 55	3. 10	10. 45	·0960					
11. 42	15. 45	11. 20	·0971					
12. 15	6. 50	12. 0	·0973					
12. 42	5. 0		***					
13. 13	7. 0	12. 42	·0980					
13. 26	5. 40		***					
13. 40	11. 20	13. 43	·0966					
14. 7	11. 10		***					
14. 32	19. 20	14. 46	·0977					
15. 19	8. 45		***					
15. 44	8. 30	15. 22	·0972					
	***	15. 53	·0979					
17. 12	14. 0	16. 37	·0974					
17. 59	12. 15	17. 22	·0980					
19. 36	14. 55	19. 17	·0978					
20. 37	14. 30	20. 37	·0961					
20. 50	16. 20		***					
20. 56	16. 0	21. 42	·0966					
	(†)	22. 46	·0961					
22. 15	15. 47*		***					
23. 59	22. 30	23. 59	·0959					
Oct. 28		Oct. 28		Oct. 28		Oct. 28		
0. 0	21. 22. 30	0. 0	·0959	0. 0	·02343	8. 0	63 ·0	64 ·5
0. 44	20. 50	0. 45	·0961	1. 20	·02330 ·01764	21. 0	56 ·8	57 ·7
1. 14	23. 15		***					
1. 55	20. 50	1. 32	·0955	6. 31	·01831			
2. 51	20. 40	2. 36	·0961	10. 10	·01824			
3. 27	18. 15	3. 17	·0955	10. 24	·01994			
5. 51	14. 30	5. 46	·0962	12. 55	·02050			
6. 15	10. 45	6. 6	·0959	23. 59	·02664			
7. 30	14. 30	6. 17	·0964					
9. 11	14. 10		***					
9. 29	12. 30	16. 18	·0977					
11. 0	14. 40	18. 52	·0977					
18. 38	13. 35		***					
21. 35	11. 30	23. 45	·0953					
22. 40	16. 0	23. 59	·0956					
23. 59	20. 0							
Oct. 29		Oct. 29		Oct. 29		Oct. 29		
0. 0	21. 20. 0	0. 0	·0956	0. 0	·02664	1. 0	59 ·0	59 ·7
1. 30	20. 0		***	2. 30	·02623	3. 0	61 ·6	62 ·2

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 29		Oct. 29		Oct. 29		Oct. 29		
h m	° ′ ″	h m		h m		h m		
1. 58	21. 22. 50	2. 4	·0964	5. 22	·02286	9. 0	61 ·8	62 ·0
2. 11	21. 0	2. 33	·0972	7. 30	·02230	21. 0	55 ·0	56 ·[illegible]
2. 26	20. 10	2. 47	·0964	9. 38	·02064			
2. 30	21. 0	3. 23	·0966	11. 23	·02257			
2. 54	20. 25	3. 40	·0960	17. 0	·02341			
3. 1	19. 30	4. 7	·0973	22. 37	·02755			
4. 15	20. 15	4. 33	·0955	23. 59	·02745			
4. 43	16. 40	4. 43	·0960					
4. 58	15. 30	4. 48	·0955					
5. 17	19. 50	5. 11	·0985					
5. 26	18. 50	5. 26	·0976					
5. 40	24. 0	5. 46	·0951					
5. 48	13. 0	5. 48	·0960					
5. 53	14. 45	6. 0	·0951					
6. 0	14. 45	6. 6	·0954					
6. 10	17. 20	6. 16	·0935					
6. 17	11. 45	6. 20	·0940					
	***	6. 33	·0929					
7. 8	13. 15	6. 45	·0933					
7. 14	15. 30		***					
7. 25	14. 50	6. 56	·0928					
7. 49	17. 0	7. 7	·0932					
8. 27	2. 0		***					
8. 33	3. 30	7. 22	·0925					
8. 43	1. 20		***					
	***	7. 44	·0931					
9. 11	1. 55	7. 48	·0927					
9. 26	5. 45	8. 22	·0937					
9. 41	1. 40	8. 33	·0934					
9. 44	3. 10	8. 46	·0946					
9. 53	1. 35	9. 0	·0932					
10. 15	10. 25	9. 2	·0950					
11. 13	16. 0	9. 25	·0947					
17. 57	15. 0	9. 32	·0951					
18. 15	13. 20	9. 46	·0948					
	***	9. 53	·0958					
19. 28	13. 15	10. 2	·0955					
19. 40	11. 0	10. 20	·0961					
	***		***					
20. 29	13. 0	18. 15	·0980					
20. 54	10. 30		***					
	***	19. 28	·0979					
22. 36	16. 40	19. 36	·0971					
22. 54	20. 20	19. 45	·0981					
23. 0	19. 55		***					
23. 13	22. 30	20. 7	·0981					
23. 31	22. 10		***					
23. 45	24. 40	20. 36	·0971					
23. 59	22. 30		***					
		21. 2	·0973					
			***					
		22. 47	·0947					
		22. 58	·0953					
		23. 7	·0945					
			***					
		23. 46	·0955					
			***					
		23. 59	·0949					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 30		Oct. 30		Oct. 30		Oct. 30		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	21. 22. 30	0. 0	·0949	0. 0	·02745	1. 0	58 ·3	59 ·2
0. 23	21. 10		***	1. 45	·02743	3. 0	61 ·9	62 ·3
1. 13	24. 15	1. 0	·0961	6. 46	·01980	9. 0	62 ·5	63 ·0
2. 0	22. 10	1. 50	·0953	8. 14	{ ·01890	21. 0	56 ·3	57 ·2
2. 15	23. 40	2. 53	·0960		{ ·02085			
2. 57	21. 0	3. 26	·0938	9. 54	·02063			
3. 14	21. 40	4. 13	·0959	14. 43	·02122			
3. 38	16. 40	4. 47	·0964	23. 59	·02629			
3. 55	17. 50	5. 11	·0959					
4. 6	16. 45	5. 30	·0966					
4. 37	18. 20	5. 47	·0961					
5. 40	15. 40	6. 3	·0968					
5. 57	11. 50	6. 13	·0965					
6. 8	12. 20	6. 33	·0979					
6. 16	11. 20	6. 46	·0947					
6. 41	18. 45	7. 6	·0964					
6. 57	9. 15	7. 42	·0970					
7. 50	12. 45	8. 18	·0969					
8. 41	8. 30	8. 33	·0966					
9. 21	11. 45	9. 15	·0976					
10. 12	7. 50	9. 30	·0971					
10. 44	9. 45	9. 40	·0973					
10. 59	12. 0	10. 0	·0966					
11. 12	11. 25	10. 23	·0967					
12. 15	13. 15	10. 52	·0974					
12. 43	12. 20		***					
13. 12	16. 30	12. 50	·0980					
13. 24	15. 20	13. 13	·0991					
13. 58	15. 0	13. 35	·0982					
14. 6	16. 0	14. 16:	·0994					
14. 43	12. 30	14. 58	·0983					
15. 4	11. 15	15. 25	·0988					
15. 21	12. 15	16. 38	·0989					
16. 0	11. 25	16. 47	·0985					
16. 24	13. 25	17. 17	·0983					
16. 40	12. 50		***					
17. 39	15. 0	18. 40:	·0992					
20. 20	12. 15		***					
20. 49	13. 0	20. 6	·0979					
21. 30	12. 15	21. 43	·0967					
21. 54	14. 50	21. 50	·0968					
22. 9	14. 15	22. 36:	·0961					
22. 40	15. 15	23. 0	·0967					
23. 12	20. 30	23. 59	·0968					
23. 23	18. 0							
23. 54	20. 0							
23. 59	22. 10							
Oct. 31		Oct. 31		Oct. 31		Oct. 31		
0. 0	21. 22. 10	0. 0	·0968	0. 0	·02629	0. 0	56 ·3	57 ·2
0. 15	20. 35		***	2. 41	·02643	1. 0	56 ·8	57 ·6
0. 30	21. 40	1. 30	·0976	8. 18	·02430	3. 0	58 ·3	58 ·6
1. 8	21. 10		***	15. 5	·02609	6. 0	58 ·0	58 ·0
1. 17	23. 0	2. 36	·0967	18. 37	·02760	9. 0	56 ·5	57 ·0
1. 49	20. 30		***	23. 59	·02700	12. 0	56 ·0	57 ·0
2. 11	22. 15	3. 15	·0969			18. 0	52 ·0	54 ·0
3. 43	18. 30	3. 20	·0966			21. 0	52 ·9	53 ·8
3. 58	16. 35	3. 53	·0968					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 31		Oct. 31						
h m	° ′ ″	h m		h m		h m	°	°
4. 13	21. 17. 50	4. 3	·0974					
5. 18	16. 30	4. 26	·0975					
5. 54	12. 20	4. 58	·0979					
6. 58	14. 30	5. 26	·0978					
	***	5. 40	·0973					
15. 12	13. 45	5. 58	·0981					
16. 9	11. 40		***					
17. 13	13. 40	7. 17	·0985					
17. 39	13. 30	7. 40	·0989					
17. 51	14. 30	8. 6	·0985					
20. 46	9. 30		***					
23. 59	21. 30	9. 20	·0990					
			***					
		11. 33	·0995					
		13. 32	·0992					
		13. 47	·0998					
		14. 33	·0993					
		16. 16	·0993					
			***					
		16. 45	·0989					
			***					
		18. 22	·0997					
			***					
		22. 6	·0984					
		22. 17	·0977					
			***					
		22. 55	·0972					
			***					
		23. 11	·0977					
		23. 59	·0977					
Nov. 1		Nov. 1		Nov. 1		Nov. 1		
0. 0	21. 21. 30	0. 0	·0977	0. 0	·02700	0. 0	53 ·0	54 ·0
0. 45	20. 10	1. 6	·0971	10. 11:	·01917	1. 0	54 ·8	55 ·2
1. 5	21. 30	1. 17	·0967	21. 42	·02680	3. 0	57 ·5	57 ·7
1. 42	19. 45		***	23. 59	·02663	9. 0	57 ·3	57 ·2
4. 37	17. 20	3. 18	·0973			21. 0	48 ·2	50 ·8
5. 50	14. 20	3. 37	·0969					
6. 13	8. 30		***					
6. 55	6. 50	5. 46	·0978					
8. 8	12. 10	6. 10	·0967					
8. 21	11. 0		***					
8. 50	12. 30	7. 5	·0976					
9. 19	11. 20	7. 26	·0972					
9. 53	12. 20	7. 47	·0975					
10. 21	11. 0	8. 15	·0971					
10. 55	11. 50	8. 27	·0974					
11. 43	8. 45	9. 3	·0973					
	***		***					
13. 11	12. 0	9. 48	·0981					
13. 39	15. 55	10. 32	·0979					
14. 30	11. 10		***					
15. 11	12. 15	11. 20	·0984					
15. 42	10. 20	11. 40	·0977					
16. 44	13. 0	12. 15	·0979					
18. 28	11. 35	12. 43	·0988					
19. 26	13. 0		***					
20. 21	8. 50	13. 12	·0985					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 1		Nov. 1						
h m	° ′ ″	h m		h m		h m		°
20. 26	21. 10. 0	13. 46	·0992					
20. 39	8. 30	14. 12	·0989					
21. 27	9. 15	17. 47	·0998					
22. 50	15. 20	19. 3	·0993					
23. 29	20. 35		***					
23. 59	20. 5	20. 20	·0996					
			***					
		21. 33	·0990					
		22. 12	·0977					
		23. 3	·0974					
		23. 37	·0974					
		23. 59	·0969					
Nov. 2		Nov. 2		Nov. 2		Nov. 2		
0. 0	21. 20. 0	0. 0	·0969	0. 0	·02663	1. 0	51·3	52·2
0. 55	20. 0	0. 33	·0976	1. 10	·02690	3. 0	53·8	55·0
1. 41	23. 20	1. 3	·0971	2. 50	·02569	9. 0	55·5	55·1
1. 45	27. 0	2. 5	·0982	4. 43	·02300	21. 0	45·0	47·6
1. 51	25. 15	2. 26	·0967	7. 15	·02090			
1. 55	25. 55		***	7. 28	·02119			
2. 12	24. 0	2. 52	·0970	7. 36	·02066			
2. 26	25. 30	3. 7	·0960	8. 15	·01954			
2. 41	22. 0	3. 21	·0969	10. 43	·01833			
2. 56	25. 30	3. 47	·0976	14. 44	·01886			
3. 4	25. 0		***	22. 43	·02691			
3. 12	26. 0	4. 15	·0980	23. 59	·02622			
3. 27	18. 30	4. 33	·0969					
3. 34	19. 35	4. 42	·0976					
3. 48	17. 0	4. 47	·0966					
4. 13	18. 15		***					
4. 22	17. 45	5. 42	·0977					
4. 37	18. 40	5. 56	·0964					
4. 43	17. 0	6. 13	·0959					
4. 51	19. 30	6. 30	·0971					
5. 0	16. 20	6. 37	·0968					
5. 15	20. 30	6. 45	·0976					
5. 24	19. 0	6. 56	·0960					
5. 36	20. 40	7. 6	·0969					
5. 43	20. 10	7. 17	·0941					
5. 51	21. 15	7. 25	·0972					
6. 2	18. 40	7. 32	·0954					
6. 12	19. 10	7. 45	·0967					
6. 26	17. 10		***					
6. 39	19. 10	8. 5	·0967					
6. 43	17. 45	8. 13	·0954					
6. 56	22. 10		***					
7. 10	18. 15	8. 45	·0972					
7. 13	20. 50	8. 50	·0966					
7. 45	3. 30		***					
8. 13	13. 0	9. 37	·0979					
8. 42	8. 20	9. 45	·0975					
8. 52	13. 0	10. 17	·0977					
9. 19	12. 30	10. 20	·0982					
9. 44	15. 0		***					
10. 0	11. 40	10. 47	·0980					
10. 27	13. 20	11. 17	·0987					
10. 44	11. 0		***					
11. 11	13. 15	12. 3	·0981					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 2		Nov. 2						
h m	° ′ ″	h m						
11. 41	21. 12. 10	12. 46	·0983					
11. 57	13. 10	12. 58	·0988					
12. 6	12. 20	13. 4	·0993					
12. 18	13. 45		***					
12. 40	13. 10	13. 17	·0989					
13. 14	15. 30	13. 40	·0997					
13. 30	13. 30	14. 0	·0989					
14. 20	16. 30	14. 7	·0993					
14. 30	14. 45	14. 23	·0985					
14. 37	16. 0	14. 46	·0982					
15. 25	8. 40	15. 8	·0977					
15. 51	7. 35	15. 37	·0980					
16. 32	9. 50		***					
16. 45	11. 30	16. 3	·0991					
	***		***					
19. 0	12. 15	16. 20	·0984					
19. 51	11. 10	16. 33	·0988					
19. 57	12. 35		***					
20. 13	11. 15	16. 47	·0984					
20. 22	12. 15		***					
20. 30	10. 0	17. 3	·0991					
20. 37	12. 0	17. 17	·0989					
20. 45	11. 0	17. 26	·0996					
20. 53	13. 0	17. 33	·0987					
20. 58	10. 50	17. 45	·0993					
21. 8	12. 30		***					
	***	19. 20	·0990					
21. 41	10. 5	19. 32	·0993					
	***	19. 45	·0987					
22. 30	12. 20	20. 17	·0988					
23. 15	16. 35	20. 26	·0981					
23. 59	17. 10	20. 33	·0991					
		20. 40	·0987					
		20. 46	·0990					
		20. 50	·0985					
		20. 58	·0989					
			***					
		23. 6	·0978					
		23. 59	·0978					
Nov. 3		Nov. 3		Nov. 3		Nov. 3		
0. 0	21. 17. 10	0. 0	·0978	0. 0	·02622	1. 0	48·0	49·0
0. 25	17. 30	0. 17	·0977	1. 21	·02640	3. 0	51·3	52·2
0. 44	20. 0	0. 33	·0983	2. 15	·02572	9. 0	51·0	52·2
1. 13	18. 20	1. 5	·0976	9. 43	·01934	22. 30	46·5	46·5
		1. 20	·0982	22. 13	·02677			
3. 4	18. 30	1. 35	·0978	23. 59	·02618			
	***	1. 47	·0979					
6. 0	13. 20	2. 5	·0972					
12. 42	11. 20	2. 15	·0978					
12. 57	11. 55	2. 30	·0975					
13. 26	10. 45		***					
17. 13	11. 45	3. 15	·0977					
18. 11	10. 30	3. 19	·0972					
19. 0	11. 45	3. 32	·0978					
	***		***					
20. 51	9. 0	6. 0	·0985					
	***	6. 17	·0993					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Nov. 3		Nov. 3						
h m	° ′ ″	h m		h m		h m	°	°
22. 11	21. 9. 55	6. 45	·0987					
	***		***					
23. 30	15. 0	13. 39	·0997					
23. 59	15. 25		***					
		16. 11	·0998					
			***					
		18. 46	·1005					
			***					
		21. 30	·0998					
		22. 2	·0988					
			***					
		23. 59	·0988					
Nov. 4		Nov. 4		Nov. 4		Nov. 4		
0. 0	21. 15. 25	0. 0	·0988	0. 0	·02618	9. 0	48·3	50·8
	***	6. 25	·1001	2. 35	·02610	21. 0	45·3	47·2
2. 10	15. 10	6. 45	·0998	8. 25	·02307			
3. 58	12. 45		***	13. 30	·02219			
7. 0	10. 0	9. 15	·1005	14. 16	·02172			
8. 7	10. 45		***	15. 11	·02197			
9. 45	9. 0	9. 50	·1000	15. 35	·02146			
10. 12	13. 5		***	19. 14	·02317			
10. 44	6. 55	10. 18	·1002	23. 30	·02466			
10. 59	6. 35	10. 40	·0990		(†)			
11. 7	21. 8. 20	11. 10	·0997					
11. 57	20. 56. 0	11. 41	·0988					
12. 13	56. 20	12. 15	·1000					
12. 21	55. 10	12. 33	·0999					
12. 37	56. 40	12. 50	·0988					
12. 59	54. 30		***					
13. 19	20. 59. 35	13. 21	·0988					
13. 30	21. 0. 20	13. 31	·0992					
13. 42	20. 59. 30	13. 47	·0992					
14. 15	21. 2. 40	14. 15	·0974					
14. 27	1. 0		***					
14. 43	13. 10	15. 17	·0976					
15. 15	2. 40	15. 46	·0991					
15. 41	7. 30	16. 3	·0982					
16. 11	4. 0	16. 20	·0992					
17. 15	8. 50	16. 45	·0994					
17. 47	12. 0		***					
18. 4	10. 45	17. 15	·0986					
	***	17. 33	·0985					
19. 52	11. 5	17. 45	·0993					
20. 22	8. 20	18. 15	·0987					
	***		***					
22. 15	14. 30	18. 45	·0994					
22. 39	17. 20		***					
23. 7	12. 10	19. 20	·0991					
23. 14	16. 15	19. 33	·0982					
23. 59	14. 10	19. 52	·0984					
			***					
		20. 40	·0979					
			***					
		21. 18	·0982					
			***					
		22. 50	·0977					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Nov. 4						
h m	° ′ ″	h m		h m		h m	°	°
		23. 15	·0972					
		23. 59	·0977					
Nov. 5		Nov. 5		Nov. 5		Nov. 5		
0. 0	21. 14. 10	0. 0	·0977		(†)	1. 0	47·4	48·2
0. 36	14. 15	0. 56	·0984	0. 55	·02556	3. 0	49·0	50·0
1. 35	18. 15		***	3. 57	·02410	9. 0	49·5	50·7
1. 45	16. 15	2. 33	·0975	6. 15	·02220	21. 0	47·8	48·6
3. 12	15. 15		***	11. 41	·02049			
3. 58	8. 50	3. 10	·0979	23. 59	·02119			
4. 49	13. 20	3. 40	·0971					
5. 57	12. 10		***					
6. 45	8. 30	4. 7	·0982					
6. 54	9. 0		***					
7. 4	8. 20	5. 16	·0981					
7. 31	10. 30		***					
9. 30	11. 15	7. 7	·0990					
9. 54	8. 40	7. 32	·0987					
10. 10	9. 0		***					
10. 28	7. 10	10. 30	·0991					
10. 41	7. 15	10. 45	·0997					
10. 54	5. 0	11. 6	·1005					
11. 15	10. 10	11. 30	·0990					
11. 42	8. 10		***					
12. 14	11. 20	13. 15	·0987					
12. 41	9. 40	15. 0	·0990					
17. 11	11. 10	15. 16	·0995					
17. 24	10. 0		***					
17. 44	11. 10	17. 3	·0991					
20. 28	9. 30	17. 28	·0996					
22. 17	11. 0		***					
22. 57	16. 30	20. 56	·0987					
23. 13	13. 20		***					
23. 59	16. 20	22. 18	·0977					
		23. 0	·0981					
		23. 18	·0971					
		23. 59	·0975					
Nov. 6		Nov. 6		Nov. 6		Nov. 6		
0. 0	21. 16. 20	0. 0	·0975	0. 0	·02119	1. 0	49·0	49·8
0. 43	17. 20	0. 16	·0980	1. 57	·02091	3. 0	51·4	52·1
0. 58	21. 0	0. 43	·0978	5. 43	·01769	9. 0	52·0	52·2
	***		(†)	10. 29	·01791	21. 0	47·3	49·0
1. 45	20. 15	1. 0	·0968*	10. 42	·01869			
2. 12	18. 0	3. 0	·0967*	15. 57	·01941			
2. 30	18. 30	9. 0	·0981*	23. 59	·02217			
4. 28	11. 20	21. 0	·0984*					
5. 45	13. 30							
8. 37	9. 30							
9. 19	10. 55							
12. 45	10. 0							
13. 13	8. 50							
13. 44	10. 5							
13. 51	11. 30							
15. 13	10. 45							
15. 44	8. 30							
16. 30	11. 0							
16. 52	10. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 6								
h m	° ′ ″	h m		h m		h m	°	°
19. 38	21. 10. 5							
20. 21	8. 50							
21. 19	9. 30							
22. 48	17. 30							
23. 51	17. 0							
23. 59	18. 20							
Nov. 7		Nov. 7		Nov. 7		Nov. 7		
0. 0	21. 18. 25	0. 0	·0970	0. 0	·02217	0. 0	49·0	50·7
2. 9	19. 55	0. 40	·0961	1. 29	·02204	1. 0	50·0	51·2
2. 50	18. 45	1. 15	·0968	5. 10	·01830	3. 0	52·9	53·2
3. 52	14. 20	2. 17	·0965	5. 40	·01841	6. 0	53·6	54·0
4. 22	15. 0		***	5. 46	·01908	9. 0	53·0	53·4
5. 29	13. 10	3. 3	·0972	6. 30	·01878	12. 0	52·0	52·5
6. 35	13. 55		***	12. 57	·01941	18. 0	46·0	48·0
7. 43	12. 30	3. 42	·0967	17. 30	·02197	21. 0	45·0	47·0
8. 20	9. 50	4. 31	·0983	23. 59	·02710			
8. 37	10. 5		***					
9. 44	6. 10	6. 22	·0985					
10. 21	2. 20	6. 46	·0981					
10. 28	4. 0	7. 25	·0987					
10. 43	1. 30	7. 58	·0980					
11. 16	7. 0	9. 15	·0983					
11. 43	5. 30	9. 26	·0977					
12. 19	7. 20		***					
13. 12	6. 40	10. 15	·0975					
14. 16	12. 0	11. 0	·0967					
15. 54	9. 0	12. 2	·0975					
16. 35	12. 0		***					
20. 7	8. 5	13. 6	·0970					
21. 31	8. 30	14. 5	·0979					
21. 57	9. 30	17. 47	·0990					
22. 43	16. 15		***					
23. 0	14. 40	19. 42	·0994					
23. 59	17. 50	20. 36	·0993					
		21. 33	·0984					
		22. 2	·0986					
		22. 56	·0974					
		23. 45	·0975					
		23. 59	·0980					
Nov. 8		Nov. 8		Nov. 8		Nov. 8		
0. 0	21. 17. 50	0. 0	·0980	0. 0	·02710	0. 0	46·0	47·5
1. 29	17. 0	0. 36	·0981	1. 48	·02746	1. 0	47·0	48·0
3. 26	14. 30		***	10. 54	·02218	3. 0	49·0	50·0
9. 38	10. 0	2. 10	·0974	22. 39	·02680	9. 0	50·0	52·0
10. 21	10. 50		***		(†)	21. 0	45·0	47·0
11. 24	9. 20	7. 7	·0988					
12. 27	11. 0		***					
17. 12	10. 50	10. 4	·0993					
17. 40	13. 20	10. 30	·0989					
18. 10	11. 50		***					
20. 9	8. 55	17. 36	·0999					
21. 27	9. 10	18. 13	·1005					
22. 37	13. 25		***					
	(†)	19. 40	·1002					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Nov. 8						
h m	° ′ ″	h m		h m		h m	°	
		22. 36	·0977					
			(†)					
Nov. 9		Nov. 9		Nov. 9		Nov. 9		
	(†)		(†)		(†)	1. 0	46·3	47·2
1. 0	21. 19. 46*	1. 0	·0986*	1. 0	·02756*	3. 0	46·[illegible]	47·1
2. 11	18. 30	1. 47	·0985	2. 0	·02790	9. 0	47·0	47·[illegible]
2. 52	15. 0		***		·02641	21. 0	44·[illegible]	45·0
3. 13	15. 20	3. 26	·0974	9. 21	·02462			
5. 40	11. 40	4. 0	·0983	21. 22	·02730			
6. 21	11. 45	5. 40	·0989	23. 10	·02732			
6. 45	10. 55	5. 56	·0986		·02691			
7. 43	10. 30	8. 50	·0994	23. 48	·02690			
8. 59	11. 0	17. 10	·1001		(†)			
15. 56	11. 20	19. 25	·1001					
19. 4	9. 40		***					
20. 26	7. 55	23. 0	·0976					
21. 40	9. 15		***					
21. 54	8. 45	23. 59	·0979					
22. 29	11. 10							
22. 44	11. 5							
23. 30	15. 15							
23. 49	15. 10							
	(†)							
Nov. 10		Nov. 10		Nov. 10		Nov. 10		
	(†)	0. 0	·0979		(†)	1. 0	46·0	47·0
0. 44	21. 16. 15	1. 7	·0981	0. 41	·02693	3. 0	48·0	48·0
1. 13	18. 30	1. 36	·0977	2. 4	·02690	9. 0	47·8	47·[illegible]
2. 14	18. 0	2. 45	·0977	5. 33	·02440	22. 55	44·2	45·[illegible]
5. 0	12. 40	4. 36	·0993	8. 52	·02380			
6. 10	11. 50	4. 45	·0991	16. 51	·02503			
6. 39	10. 0	5. 17	·0994	23. 59	·02696			
7. 26	12. 0	5. 40	·0993					
8. 48	11. 30	6. 3	·0995					
9. 28	8. 30	6. 38	·0987					
10. 7	9. 50	8. 33	·0999					
10. 43	9. 15	9. 4	·0997					
11. 11	10. 20	9. 32	·1000					
12. 45	9. 20	10. 2	·0999					
14. 10	10. 40	10. 26	·1004					
19. 12	8. 45	10. 58	·1000					
20. 45	6. 20		***					
21. 48	6. 25	14. 50	·1001					
23. 59	12. 30	17. 40	·1006					
		20. 36	·1000					
		22. 17	·0989					
		23. 30	·0987					
			(†)					
Nov. 11		Nov. 11		Nov. 11		Nov. 11		
0. 0	21. 12. 30		(†)	0. 0	·02696	6. 50	46·0	47·0
1. 13	17. 10	2. 10	·0986	1. 44	·02740	21. 6	41·7	43·1
1. 41	16. 0	5. 16	·1001	6. 29	·02618			
2. 14	16. 20	6. 16	·0997	11. 57	·02618			
5. 27	12. 0	6. 26	·1000	15. 56	·02744			
6. 28	3. 45	6. 46	·0995	16. 9	·02722			
7. 21	8. 40	7. 22	·1001	20. 46	·02730			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 11		Nov. 11		Nov. 11				
h m	° ′ ″	h m		h m		h m	°	°
8. 7	21. 10. 5	8. 0	·0989	23. 59	·02680			
8. 37	5. 0	8. 46	·0997					
8. 55	8. 20	9. 10	·1010					
9. 15	5. 15	9. 30	·1003					
10. 52	10. 45	9. 47	·1009					
14. 15	11. 20	10. 36	·0998 ***					
15. 30	8. 50	15. 6	·1002					
15. 55	10. 0	17. 33	·1010					
16. 28	9. 0	18. 37	·0982					
19. 30	10. 10	19. 28	·0998					
20. 41	8. 30	20. 7	·1004					
23. 59	14. 15	20. 37	·0986					
		20. 54	·0998					
		21. 18	·0987					
		21. 30	·0991					
		21. 42	·0991 ***					
		23. 30	·1007					
		23. 59	·1005					
Nov. 12		Nov. 12		Nov. 12		Nov. 12		
0. 0	21. 14. 15	0. 0	·1005	0. 0	·02680	1. 0	43·5	44·3
1. 27	16. 30	2. 10	·0997 ***	2. 13	·02667	3. 0	46·0	46·6
1. 45	15. 20	4. 3	·0992 ***	10. 53:	·02109	9. 0	48·5	49·0
2. 12	15. 45	7. 17	·1000	23. 59	·02140	21. 0	47·3	48·2
5. 49	11. 50	9. 20	·0996 ***					
8. 51	10. 50	18. 46	·1004					
9. 13	9. 20	20. 13	·1000					
16. 27	11. 20	23. 3	·0973					
21. 18	8. 30	23. 59	·0974					
23. 28	15. 0							
23. 44	13. 30							
23. 52	15. 0							
23. 59	13. 50							
Nov. 13		Nov. 13		Nov. 13		Nov. 13		
0. 0	21. 13. 50	0. 0	·0974	0. 0	·02140	1. 0	49·0	49·7
1. 2	17. 0	0. 35	·0979	1. 28	·02112	3. 0	51·7	51·4
1. 26	16. 40	1. 16	·0975	7. 27	·01661	9. 0	53·5	53·0
1. 39	17. 15	2. 30	·0979	17. 48	·01698	21. 0	50·4	51·0
5. 24	13. 20	4. 17	·0979	23. 59	·01797			
5. 45	11. 0	6. 10	·0985					
6. 22	13. 10	6. 32	·0983 ***					
13. 30	10. 30	14. 37	·0995					
16. 3	11. 10	18. 36	·0997					
21. 33	9. 0	19. 46	·0994					
23. 11	13. 30	22. 16	·0979 ***					
23. 59	17. 30	23. 59	·0979					
Nov. 14		Nov. 14		Nov. 14		Nov. 14		
0. 0	21. 17. 30	0. 0	·0979 ***	0. 0	·01797	0. 0	51·3	52·2
0. 27	15. 0	0. 50	·0983	4. 44	·01718	1. 0	52·0	52·7
1. 26	16. 30	1. 35	·0979 ***	10. 0	·01770	3. 0	52·8	52·5
2. 12	16. 0			15. 58:	·02038	6. 0	53·4	53·5
2. 38	14. 30			23. 59	·01942	9. 0	53·7	53·3

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 14		Nov. 14				Nov. 14		
h m	° ′ ″	h m		h m		h m	°	°
2. 57	21. 15. 40	2. 46	·0987			12. 0	53·0	52·4
5. 10	13. 0	3. 37	·0981			18. 0	52·7	53·1
6. 22	13. 10	4. 16	·0981			21. 0	52·8	53·3
7. 9	11. 45	4. 36	·0979					
7. 21	12. 20	6. 16	·0987					
11. 30	9. 20	6. 37	·0983 ***					
13. 13	10. 40	7. 17	·0987					
13. 36	12. 50	8. 0	·0983					
14. 0	9. 40	8. 36	·0988					
15. 13	8. 50	9. 25	·0987					
16. 51	10. 30	12. 17	·0999					
19. 17	9. 20	13. 5	·0999					
21. 45	11. 30	13. 28	·1006					
23. 26	19. 20	13. 50	·1007					
23. 59	18. 10	14. 20	·1000 ***					
		19. 30	·1000 ***					
		23. 59	·0974					
Nov. 15		Nov. 15		Nov. 15		Nov. 15		
0. 0	21. 18. 10	0. 0	·0974 ***	0. 0	·01942	0. 0	52·7	53·5
0. 12	17. 50	0. 40	·0974 ***	1. 25:	·01951	1. 0	53·3	53·6
0. 50	20. 10	3. 0	·0963 ***	4. 24	·01764	3. 0	54·7	54·2
1. 2	19. 0	4. 26	·0970 ***	9. 45	·01820	9. 0	53·0	52·7
2. 44	21. 20	5. 40	·0968 ***	14. 12	·01912	21. 8	46·2	47·0
4. 43	15. 40	8. 3	·0980	23. 59	·02671			
6. 23	16. 25	8. 36	·0979					
7. 29	12. 50	9. 30	·0989					
8. 15	13. 45	9. 40	·0979					
9. 28	10. 0	10. 36	·0993					
9. 51	11. 45	10. 58	·0983					
10. 40	6. 0	11. 27	·0986					
11. 18	3. 10	11. 48	·0976					
11. 45	6. 30	12. 4	·0983					
12. 0	3. 45	12. 22	·0979 ***					
12. 43	6. 30	13. 33	·0987					
12. 58	5. 5	13. 46	·0989 ***					
13. 30	5. 10	14. 30	·0986 ***					
14. 6	9. 30	15. 38	·0997 ***					
14. 29	5. 20	17. 46	·1004 ***					
14. 47	3. 45	19. 33	·0999 ***					
16. 11	9. 25	21. 49	·0979 ***					
16. 37	9. 30	23. 5	·0973					
17. 10	12. 0	23. 59	·0971					
18. 9	10. 50							
19. 43	12. 40							
21. 15	10. 0							
23. 14	17. 50							
23. 27	16. 45							
23. 59	18. 15							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.
Nov.16	
h m	° ′ ″
0. 0	21. 18. 15
0. 12	17. 55
0. 20	21. 45
1. 6	18. 30
2. 0	19. 20
2. 25	17. 30
2. 41	18. 10
5. 44	13. 10
6. 54	13. 50
9. 10	12. 50
10. 13	10. 10
11. 41	12. 0
13. 37	12. 5
13. 54	15. 50
14. 30	9. 50
17. 0	11. 15
20. 25	9. 0
22. 7	10. 30
23. 59	15. 0
Nov.17	
0. 0	21. 15. 0
0. 38	15. 10
0. 45	14. 10
1. 12	17. 0
1. 57	17. 30
3. 40	13. 20
5. 27	13. 30
6. 11	15. 10
6. 30	14. 55
6. 51	13. 45
7. 14	10. 30
7. 26	10. 15
7. 30	11. 40
7. 43	10. 35
7. 50	11. 0
7. 59	10. 0
8. 26	11. 20
8. 44	13. 20
14. 58	8. 20
16. 17	10. 40
16. 39	9. 5
17. 59	11. 15
18. 52	9. 30
19. 40	11. 0
20. 11	9. 20
20. 54	10. 45
21. 1	9. 0
21. 13	11. 0
21. 28	9. 50
21. 51	10. 40

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Nov.16	
h m	
0. 0	·0971
3. 7	·0971
3. 38	·0976
3. 46	·0972
4. 16	·0971
6. 10	·0983
	***
7. 0	·0979
	***
7. 20	·0983
7. 40	·0979
8. 6	·0982
8. 30	·0979
9. 5	·0984
9. 28	·0980
10. 0	·0984
	***
13. 17	·0987
13. 41	·0991
	***
15. 44	·0986
17. 36	·0992
20. 7	·0991
	***
23. 25	·0977
23. 59	·0977
Nov.17	
0. 0	·0977
	***
2. 45	·0976
3. 29	·0983
	***
6. 36	·0992
7. 3	·0983
7. 20	·0993
7. 35	·0993
7. 45	·0989
8. 5	·0997
8. 14	·0991
8. 38	·0990
9. 47	·0993
13. 2	·0992
13. 14	·1000
13. 25	·0997
13. 47	·1000
	***
18. 20	·1000
18. 47	·0999
20. 17	·1000
20. 54	·0990
21. 8	·0995
	***
22. 11	·0987
	***
23. 17	·0993
23. 59	·0987

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Nov.16	
h m	
0. 0	·02671
2. 8	·02674
7. 41	·02245
13. 48	·02111
14. 14	·02093
21. 56	·02300
23. 59	·02325
Nov.17	
0. 0	·02325
5. 57	·02200
10. 7	·02391
15. 29	·02553
19. 42	·02790
23. 59	·02748

Greenwich Mean Solar Time.	Readings of Thermometers. of H. F. Magnet.	Readings of Thermometers. of V. F. Magnet.
Nov.16		
h m	°	°
1. 0	48·0	48·0
3. 0	49·8	50·7
9. 0	51·8	51·6
21. 0	48·2	49·6
Nov.17		
1. 0	48·2	49·5
3. 0	50·8	51·2
9. 0	46·7	47·5
22. 15	41·8	44·3

Greenwich Mean Solar Time.	Western Declination.
Nov.17	
h m	° ′ ″
22. 17	21. 15. 10
	***
23. 29	13. 30
23. 59	15. 10
Nov.18	
0. 0	21. 15. 10
0. 49	17. 30
1. 10	20. 15
1. 28	19. 0
1. 42	20. 20
2. 4	20. 0
2. 14	20. 50
2. 57	16. 25
9. 41	11. 40
21. 4	9. 10
21. 51	12. 10
22. 2	11. 50
22. 38	15. 30
23. 38	17. 50
23. 59	17. 20
Nov.19	
0. 0	21. 17. 20
1. 21	17. 0
1. 37	18. 10
2. 3	17. 30
2. 12	19. 40
2. 43	17. 10
6. 57	16. 15
10. 48	12. 30
16. 15	12. 10
16. 43	11. 10
17. 21	13. 20
17. 57	11. 15
21. 56	10. 20
23. 59	16. 0
Nov.20	
0. 0	21. 16. 0
0. 52	17. 40
1. 44	16. 50
1. 54	17. 30
2. 39	17. 15
2. 59	16. 10
7. 57	13. 50
8. 12	12. 30
9. 58	12. 20

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
Nov.18	
0. 0	·0987
0. 38	·0985
1. 6	·0989
1. 30	·0982
	***
2. 7	·0983
2. 40	·0973
3. 17	·0986
	***
5. 26	·0997
5. 47	·0993
6. 7	·1001
	***
7. 6	·0997
	***
18. 47	·1006
	***
23. 59	·0984
Nov.19	
0. 0	·0984
1. 45	·0979
2. 50	·0976
3. 15	·0981
3. 44	·0979
4. 0	·0987
	***
4. 26	·0981
	***
5. 26	·0984
	***
10. 0	·0979
	***
15. 6	·0987
15. 38	·0990
16. 37	·0988
	***
18. 6	·0994
19. 37	·0992
	***
23. 59	·0975
Nov.20	
0. 0	·0975
2. 26	·0974
	***
5. 38	·0979
7. 36	·0975
8. 2	·0985
8. 13	·0976
8. 50	·0974
9. 10	·0981

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Nov.18	
0. 0	·02748
2. 51	·02780
8. 21	·02709
11. 24	·02737
19. 24	·02750
23. 59	·02729
Nov.19	
0. 0	·02729
1. 29	·02675
12. 24	·01720
23. 59	·02237
Nov.20	
0. 0	·02237
2. 30	·02120
6. 37	·01700
7. 56	·01624
13. 10	·01650
19. 21	·01864
23. 59	·02200

Greenwich Mean Solar Time.	Readings of Thermometers. of H. F. Magnet.	Readings of Thermometers. of V. F. Magnet.
h m	°	°
Nov.18		
9. 5	44·3	44·2
21. 0	42·0	43·0
Nov.19		
1. 0	44·0	45·0
3. 0	46·8	47·1
9. 0	49·0	49·0
21. 0	44·3	45·1
Nov.20		
1. 0	46·8	47·0
3. 0	49·3	50·1
9. 0	51·0	50·5
21. 0	44·3	45·4

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov.20		Nov.20						
h m	° ′ ″	h m		h m		h m	°	°
10. 40	21. 9. 20	9. 18	·0975					
11. 15	11. 10	10. 15	·0976					
18. 49	11. 15	10. 39	·0981					
21. 39	9. 40	10. 50	·0979					
22. 15	11. 50	11. 15	·0984					
22. 40	11. 45	11. 30	·0979					
23. 59	14. 40		***					
		17. 40	·0995					
		21. 4	·0993					
		22. 32	·0983					
		23. 59	·0984					
Nov.21		Nov.21		Nov.21		Nov.21		
0. 0	21. 14. 40	0. 0	·0984	0. 0	·02200	0. 0	45 ·0	45 ·3
0. 29	13. 10		***	1. 52	·02293	1. 0	45 ·8	46 ·3
0. 54	15. 30	1. 45	·0986	9. 19	·01969	3. 0	48 ·2	48 ·1
6. 7	12. 30	5. 2	·0991	15. 29	·01880	6. 0	50 ·5	50 ·0
7. 8	10. 30		***	20. 12	·01662	9. 0	52 ·0	51 ·5
12. 7	10. 5	13. 10	·0997	23. 59	·01732	12. 0	51 ·6	50 ·9
13. 0	11. 30	13. 48	·0992			18. 0	51 ·2	50 ·6
20. 7	10. 30	18. 16	·0994			21. 0	52 ·3	52 ·5
22. 0	12. 20	22. 42	·0980					
22. 55	16. 10	23. 59	·0980					
23. 59	17. 10							
Nov.22		Nov.22		Nov.22		Nov.22		
0. 0	21. 17. 10	0. 0	·0980	0. 0	·01732	0. 0	52 ·3	52 ·2
1. 7	18. 15	1. 36	·0983	2. 15	{ ·01688 ·01742	1. 0	52 ·8	53 ·0
2. 9	16. 0	3. 45	·0982			3. 0	54 ·7	54 ·2
2. 29	16. 30	6. 6	·0983	8. 54	·01760	9. 0	54 ·5	55 ·0
7. 22	11. 10	7. 58	·0991	14. 7	·02003	21. 0	44 ·2	46 ·3
15. 58	10. 45		***	23. 59	·02825			
18. 40	8. 40	12. 10	·0998					
20. 0	10. 45		***					
21. 5	9. 30	14. 11	·0998					
22. 11	10. 45		***					
23. 37	15. 50	17. 58	·1012					
23. 44	18. 0		***					
23. 51	16. 55	20. 36	·1010					
23. 59	18. 10	21. 20	·1004					
		21. 50	·1007					
		22. 15	·1000					
		22. 36	·1011					
			***					
		23. 59	·0987					
Nov.23		Nov.23		Nov.23		Nov.23		
0. 0	21. 18. 5	0. 0	·0986	0. 0	·02825	1. 0	46 ·5	47 ·2
0. 11	17. 0	1. 48	·0975	1. 29	·02846	3. 0	49 ·6	49 ·7
0. 13	18. 0	2. 6	·0990	5. 21	·02486	9. 0	51 ·0	50 ·2
0. 52	17. 30	2. 36:	·0987	8. 17	·02340	21. 0	47 ·8	48 ·3
1. 7	15. 20	3. 10	·0991	9. 43	·02252			
2. 15	18. 25	4. 6:	·0973	13. 51	·02230			
3. 29	18. 40	5. 5	·0991	23. 59	·02505			
4. 5	15. 25	5. 36	·0974					
4. 15	16. 30		***					
4. 52	14. 20	6. 10	·0970					
5. 24	17. 0	6. 30	·0979					
5. 51	12. 0	6. 46	·0980					
5. 55	12. 10	7. 7	·0977					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov.23		Nov.23						
h m	° ′ ″	h m		h m		h m	°	°
6. 15	21. 6. 45	7. 18	·0967					
6. 31	9. 20	7. 36	·0967					
6. 42	9. 0	7. 58	·0976					
6. 54	10. 30	8. 11	·0977					
7. 15	8. 20		***					
7. 42	3. 40	8. 40	·0991					
8. 13	8. 50	8. 56	·0988					
8. 38	3. 20	9. 6	·0997					
8. 47	6. 30		***					
9. 11	3. 30	9. 35	·0981					
9. 14	4. 20	9. 46	·0983					
9. 28	3. 30	10. 6	·0977					
9. 37	3. 45	11. 30	·0988					
9. 48	1. 20	12. 7	·0988					
10. 10	0. 40		***					
11. 24	8. 0	13. 18	·0998					
11. 49	4. 45	13. 45	·0998					
12. 4	7. 15		***					
12. 30	7. 30	15. 4:	·0990					
13. 0	9. 30	16. 15	·1000					
13. 51	7. 20		***					
15. 15	9. 10	19. 52	·0997					
16. 1	12. 40		***					
16. 12	11. 30	22. 25	·0982					
16. 19	12. 10	23. 40	·0979					
16. 43	9. 0	23. 51	·0974					
16. 49	10. 10	23. 59	·0979					
17. 29	8. 0							
17. 37	9. 20							
17. 45	7. 50							
17. 54	9. 40							
17. 58	8. 50							
18. 44	8. 10							
18. 51	9. 15							
18. 57	7. 20							
19. 8	9. 0							
19. 13	8. 10							
	***							
20. 48	8. 50							
	***							
22. 54	12. 0							
23. 21	15. 30							
23. 43	14. 0							
23. 46	15. 10							
23. 56	13. 40							
23. 59	14. 0							
Nov.24		Nov.24		Nov.24		Nov.24		
0. 0	21. 14. 0	0. 0	·0980	0. 0	·02505	1. 0	49 ·6	49 ·8
0. 29	15. 10	3. 52	·0980	1. 39	·02486	3. 0	51 ·0	51 ·2
0. 50	18. 30	4. 14	·0976	3. 12	·02420	9. 0	51 ·4	50 ·5
1. 13	16. 45	6. 5	·0988	3. 27	·02428	22. 26	45 ·0	45 ·4
3. 20	15. 55		***	9. 52:	·02110			
3. 30	16. 50	10. 25	·0997	20. 1	·02372			
3. 51	16. 20	11. 0	·0996	23. 59	·02580			
4. 13	17. 10	13. 0	·1000					
6. 11	11. 40	13. 51	·0996					
7. 28	12. 0	14. 30	·1003					
8. 37	8. 20		***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.24		Nov.24						
h m	° ′ ″	h m		h m		h m	°	°
9. 0	21. 10. 20	15. 30	·1002					
9. 21	10. 30	16. 15	·1007					
9. 35	9. 50	20. 30	·1010					
12. 28	10. 40		***					
12. 47	9. 55	23. 59	·0997					
13. 44	12. 10							
14. 12	15. 20							
14. 52	11. 50							
15. 25	12. 10							
16. 58	10. 10							
19. 12	10. 20							
19. 45	11. 40							
21. 2	8. 50							
21. 12	9. 10							
21. 26	8. 40							
23. 43	12. 40							
23. 54	12. 20							
23. 59	13. 0							
Nov.25		Nov.25		Nov.25		Nov.25		
0. 0	21. 13. 5	0. 0	·0997	0. 0	·02580	10. 9	47·0	48·0
1. 6	16. 50	1. 5:	·0992	2. 40	·02631	21. 0	44·0	45·0
1. 29	17. 20	2. 18	·0984	6. 0	·02584			
2. 22	15. 30	3. 9	·0988	13. 58	·02671			
2. 59	16. 40	3. 25	·0982	23. 59	·02829			
3. 50	14. 15	3. 40	·0989					
5. 26	13. 20		***					
5. 54	8. 25	5. 30	·0998					
6. 21	7. 0	5. 45	·0990					
6. 45	11. 0	5. 56	·0998					
6. 57	10. 30	6. 6	·0994					
7. 30:	11. 45	6. 23	·0999					
8. 18	7. 40	6. 46	·0990					
8. 42	9. 50	7. 36	·0998					
9. 15	8. 45		***					
10. 52	8. 50	17. 10	·1010					
11. 15	8. 0	17. 57:	·1013					
11. 42	8. 50	20. 0	·1007					
12. 14	8. 30	21. 30	·1009					
15. 43	11. 40	22. 40	·0995					
16. 45	9. 45		***					
19. 16	9. 30	23. 59	·0990					
21. 37	13. 40							
21. 46	15. 30							
22. 45	17. 20							
23. 35	20. 40							
	(†)							
Nov.26		Nov.26		Nov.26		Nov.26		
	(†)	0. 0	·0990	0. 0	·02829	1. 0	46·3	46·8
0. 52	21. 17. 40		***	2. 21	·02810	3. 0	48·3	48·6
1. 45	19. 0	0. 26	·0989	9. 22:	·02408	9. 0	48·5	48·5
2. 23	11. 40		***	17. 51	·02300	21. 0	47·3	47·7
2. 45	17. 20	1. 0	·0980	23. 59	·02471			
3. 10	17. 45	1. 18	·0988					
4. 0	14. 30	1. 40	·0978					
7. 14	11. 40	1. 46	·0973					
7. 30	12. 20		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.26		Nov.26						
h m	° ′ ″	h m		h m		h m	°	°
8. 37	21. 11. 20	2. 20	·0986					
11. 15	10. 45	2. 37	·0978					
13. 12	12. 30	3. 0	·0979					
14. 9	11. 0	4. 7	·0989					
14. 51	12. 40	7. 11	·0993					
15. 40	11. 20	7. 34	·0989					
15. 55	12. 10		***					
16. 11	11. 50	16. 10	·1007					
16. 21	12. 50	16. 30	·1013					
16. 54	12. 10	16. 46	·1010					
17. 11	13. 20		***					
17. 43	13. 0	17. 40	·1014					
18. 0	11. 20		***					
18. 42	11. 40	19. 56	·0998					
19. 13	10. 50	20. 20	·1002					
	***		***					
21. 6	10. 0	22. 20	·0990					
	***	22. 46	·0979					
22. 15	12. 0	23. 17	·0986					
22. 30	11. 30	23. 35	·0977					
23. 16	16. 50	23. 47	·0981					
23. 37	15. 30	23. 59	·0979					
23. 50	16. 20							
23. 59	16. 15							
Nov.27		Nov.27		Nov.27		Nov.27		
0. 0	21. 16. 15	0. 0	·0979	0. 0	·02471	1. 0	50·3	50·8
0. 51	16. 0		***	1. 59	·02350	3. 0	52·6	52·2
1. 12	17. 40	0. 30	·0975	5. 12	·02002	9. 0	52·7	52·5
1. 30	17. 10	0. 47	·0979	7. 30	·01825	21. 0	47·8	48·7
2. 37	18. 25	1. 3	·0978	11. 37	·01770			
2. 50	19. 0	1. 40	·0982	22. 13	·02080			
3. 15	17. 0	2. 17	·0983	23. 59	·02147			
4. 21	14. 50		***					
4. 51	15. 0	2. 48	·0975					
5. 1	13. 40		***					
5. 15	14. 0	3. 45	·0974					
5. 44	7. 20	4. 20	·0981					
6. 40	9. 50		***					
6. 57	6. 30	4. 47	·0979					
7. 22	13. 40	5. 13	·0987					
7. 37	10. 0	5. 23	·0981					
7. 42	10. 50	5. 46	·0989					
7. 55	8. 30	6. 0	·0986					
8. 33	10. 5	6. 18	·0994					
8. 51	9. 40	6. 46	·0981					
9. 12	10. 50	6. 52	·0981					
9. 27	9. 35	7. 7	·0989					
12. 0	11. 40	7. 26	·0976					
12. 30	10. 50	7. 33	·0978					
13. 28	12. 10	7. 45	·0973					
20. 26	10. 20	7. 52	·0979					
21. 15	13. 0	8. 3	·0974					
21. 36	11. 45		***					
23. 6	14. 50	9. 0	·0988					
23. 21	17. 10	18. 30	·1001					
23. 37	16. 55		***					
	(†)	19. 47	·0998					
			***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
h m	° ′ ″
Nov. 28	
	(†)
0. 10	21. 17. 30
0. 18	18. 10
0. 37	17. 10
1. 26	16. 30
1. 49	18. 0
2. 25	16. 40
2. 59	17. 15
3. 20	16. 0
3. 35	16. 10
4. 28	12. 40
5. 30	14. 10
5. 57	12. 20
6. 58	14. 0
9. 21	11. 15
11. 11	11. 30
13. 21	10. 20
13. 40	11. 50
14. 0	8. 0
14. 31	10. 0
14. 56	8. 20
15. 17	9. 40
15. 35	8. 30
15. 48	9. 45
16. 9	8. 45
17. 13	9. 20
17. 50	11. 50
18. 51	9. 30
21. 40	9. 0
22. 12	10. 30
22. 30	12. 30
22. 53	11. 20
23. 51	14. 30
23. 59	14. 20
Nov. 29	
0. 0	21. 14. 20
0. 13	15. 30
1. 10	14. 50
1. 22	17. 10
1. 36	15. 20
2. 52	15. 20
3. 27	12. 45
4. 40	13. 30
4. 50	12. 45
5. 7	12. 50
5. 22	10. 45
5. 30	10. 50
5. 51	8. 20
6. 7	12. 50
6. 43	21. 8. 45
6. 48	10. 0
6. 57	9. 0
7. 0	9. 30
7. 25	7. 20
7. 31	7. 40
7. 53	3. 20
8. 16	6. 0
8. 30	4. 30
9. 21	7. 20
10. 0	6. 45
10. 12	7. 50
10. 40	8. 20
10. 56	6. 40
11. 54	9. 20
12. 27	8. 0
12. 57	9. 30
13. 10	8. 10
13. 28	8. 0
13. 40	8. 50
13. 55	7. 40
14. 28	9. 20
16. 5	7. 50
16. 44:	11. 45
17. 35	9. 30
18. 0	9. 10
18. 7	10. 20
18. 14	8. 30
19. 25	7. 40
19. 50	8. 40
20. 40	8. 10
20. 49	9. 30
21. 13	9. 20
21. 36	10. 45
21. 55	14. 0
23. 37	15. 0
23. 59	18. 15
Nov. 30	
0. 0	21. 18. 20
0. 15	15. 30
0. 39	15. 45
0. 58	18. 45
1. 45	16. 0
2. 23	15. 30
2. 44	16. 30
3. 33	14. 40
4. 26	15. 0
5. 29	10. 45
6. 0	10. 0
6. 26	5. 30
6. 42	6. 30
6. 49	6. 0
7. 19	10. 45
7. 39	11. 0
7. 51	12. 0
9. 49	11. 15
10. 0	10. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
Nov. 27	
21. 20	·0984
21. 52	·0988 ***
23. 2	·0976 ***
23. 59	·0973
Nov. 28	
0. 0	·0973
1. 5	·0977 ***
4. 45	·0971
5. 32	·0976
5. 47:	·0973
6. 18	·0980
7. 2	·0975
8. 15	·0982 ***
13. 16	·0993
13. 38	·0999
14. 5	·0991 ***
18. 47	·1005
21. 13	·0991 ***
23. 7	·0984
23. 59	·0986
Nov. 29	
0. 0	·0986 ***
1. 47	·0974
2. 4	·0982
3. 43	·0977
4. 15	·0984
4. 18	·0982
4. 40	·0983
5. 0	·0978 ***
5. 50	·0978
6. 16	·0990
6. 30	·0979 ***
7. 7	·0986
7. 20	·0979
8. 15	·0982
8. 43	·0985 ***
11. 22	·0995
11. 45	·0991 ***
12. 40	·0995
13. 15	·1005 ***
15. 7	·0998 ***
16. 35	·1006
17. 6	·1001
17. 42	·1006 ***
20. 37	·0993 ***
22. 13	·0996 ***
23. 59	·0981
Nov. 30	
0. 0	·0981
0. 20	·0972
0. 47	·0982 ***
2. 33	·0980
3. 6	·0973
3. 16	·0974
3. 45	·0969 ***
6. 16	·0986
6. 40	·0985 ***
8. 30	·0989 ***
11. 46	·0992 ***
14. 40	·0996 ***
16. 26	·0998

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Nov. 28	
0. 0	·02147
1. 30	·02140
6. 0	·01857
9. 42	·01750
13. 51	·01767
22. 41	·02091
23. 59	·02057
Nov. 29	
0. 0	·02057
6. 17	·01906
9. 42	·01710
13. 49	·01704
18. 22	·01820
23. 59	·01991
Nov. 30	
0. 0	·01991
1. 19	·02003
4. 36	·01781
5. 5	{ ·01810 ·02038
6. 20	·01970
11. 12	·01961
13. 7	·02032
18. 24	·02382
23. 0	·02590
23. 59	·02574

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Nov. 28		
0. 0	49·0	49·1
1. 0	50·0	50·0
3. 0	51·7	51·5
6. 0	52·0	51·0
9. 0	52·0	51·0
12. 0	51·5	51·0
18. 0	48·0	48·0
21. 10	48·0	48·0
Nov. 29		
0. 0	49·2	49·1
1. 0	50·0	49·8
3. 0	51·2	50·4
9. 0	52·5	53·0
21. 0	48·8	49·0
Nov. 30		
1. 0	50·6	51·0
3. 0	53·0	52·7
9. 0	54·0	53·5
21. 0	50·0	50·7

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.30		Nov.30						
h m	° ′ ″	h m		h m		h m	°	°
10. 43	21. 10. 45	17. 16	·1005					
11. 10	10. 5	20. 3	·1001					
11. 42	12. 40		***					
12. 13	11. 0	23. 59	·0977					
12. 45	10. 40							
13. 8	11. 40							
13. 51	10. 40							
14. 29	11. 30							
15. 24	10. 0							
16. 7	10. 30							
16. 29	12. 0							
17. 30	9. 10							
20. 44	8. 30							
21. 36	10. 0							
	***							
23. 37	16. 0							
23. 59	15. 30							
Dec. 1		Dec. 1		Dec. 1		Dec. 1		
0. 0	21. 15. 30	0. 0	·0977	0. 0	·02574	1. 0	53·0	52·2
0. 20	17. 40	0. 47	·0985	6. 51:	·02171	3. 0	54·0	53·2
0. 37	17. 0	1. 15	·0986	15. 55	·02300	9. 0	52·7	52·4
1. 5	18. 40	2. 0	·0989	23. 59	·02536	22. 30	49·4	51·0
2. 21	17. 40		***					
2. 28	18. 30	8. 18	·1006					
3. 40	15. 5		***					
4. 44	13. 20	18. 26	·1013					
10. 8	9. 40	18. 56	·1015					
10. 26	11. 30	21. 13	·1009					
10. 57	9. 20	23. 59	·0999					
11. 13	11. 0							
12. 30	10. 0							
12. 42	10. 50							
13. 29	9. 15							
13. 43	10. 5							
17. 21	10. 20							
18. 40	11. 20							
20. 39	9. 20							
22. 34	10. 50							
	(†)							
Dec. 2		Dec. 2		Dec. 2		Dec. 2		
10. 13	21. 5. 45*	0. 0	·0999	0. 0	·02536	10. 13	49·0	50·0
21. 8	8. 31*	0. 18	·0999	6. 10	·02571	21. 8	49·0	49·7
		0. 56	·0991	10. 44	·02653			
		1. 40	·0974	19. 37	·02688			
			***	23. 59	·02771			
		2. 17	·0982					
		2. 30	·0977					
		2. 45	·0982					
		2. 56	·0981					
		3. 45	·0994					
			***					
		6. 43	·1006					
			***					
		9. 42	·0999					
			***					
		11. 50	·1010					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Dec. 2						
h m	° ′ ″	h m		h m		h m	°	°
		12. 46	·1007					
		13. 32	·1010					
		13. 45	·1006					
		14. 8	·1013					
		14. 40	·1011					
		15. 13	·1004					
			***					
		19. 30	·1001					
		20. 15	·1009					
			***					
		23. 59	·0995					
Dec. 3		Dec. 3		Dec. 3		Dec. 3		
	(†)	0. 0	·0995	0. 0	·02771	1. 0	50·0	50·0
0. 8	21. 12. 30	0. 48	·0989	3. 42	·02670	3. 0	51·4	51·0
0. 29	12. 0	2. 6	·1001	13. 46:	·02210	9. 0	53·3	52·6
0. 41	15. 0		***	22. 13	·02433	21. 0	50·7	51·3
1. 42	16. 5	4. 36	·0998	23. 59	·02430			
1. 51	14. 40	4. 43	·1005					
3. 45	14. 30	5. 46	·0991					
4. 22	15. 50	6. 33	·0997					
4. 59	13. 50	10. 13	·1003					
5. 30	15. 0	10. 30	·0999					
6. 37	13. 0	10. 46	·1008					
9. 11	11. 40	11. 13	·1003					
9. 39	8. 0		***					
9. 54	11. 20	14. 40	·1001					
10. 13	10. 0		***					
10. 40	11. 20	17. 53	·1010					
12. 12	10. 25	20. 46	·1005					
14. 53	11. 20	23. 59	·0992					
20. 10	10. 30							
22. 42	14. 50							
23. 28	14. 10							
	(†)							
Dec. 4		Dec. 4		Dec. 4		Dec. 4		
	(†)	0. 0	·0992	0. 0	·02430	1. 0	52·2	52·1
0. 43	21. 13. 0	1. 15	·1000	12. 4:	·02051	3. 0	53·4	53·2
0. 59	13. 20	3. 0	·0997	23. 11	·02304	9. 10	53·4	53·7
1. 26	14. 30	5. 36	·1004	23. 59	·02312	21. 0	51·0	51·4
3. 53	14. 15		***					
10. 47	10. 20	10. 58	·1008					
10. 54	11. 40	11. 17	·1002					
11. 12	9. 30	11. 46	·1007					
20. 26	9. 40		***					
23. 50	15. 40	19. 58	·1010					
23. 59	14. 40		***					
		22. 40	·0990					
			***					
		23. 59	·0989					
Dec. 5		Dec. 5		Dec. 5		Dec. 5		
0. 0	21. 14. 40	0. 0	·0989	0. 0	·02312	0. 0	51·9	52·0
0. 52	14. 0	1. 10	·1000	2. 6	·02270	1. 0	52·3	52·6
2. 12	17. 20	2. 50	·0995	8. 27	·01932	3. 0	53·8	53·7
4. 42	13. 50	4. 23	·1002	14. 45	·01973	6. 0	55·5	54·5
7. 39	14. 30		***	22. 11	·02212	9. 0	55·0	53·9

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 5		Dec. 5		Dec. 5		Dec. 5		
h m	° ′ ″	h m		h m		h m	°	°
10. 51	21. 13. 15	8. 43	·0998	23. 59	·02242	12. 0	54 ·5	53 ·5
12. 43	10. 45		***			18. 0	52 ·6	52 ·0
13. 30	12. 0	12. 38	·0996			21. 0	52 ·7	52 ·5
20. 55	9. 50		***					
23. 59	15. 30	17. 10	·1007					
		21. 20	·1003					
			***					
		23. 59	·0990					
Dec. 6		Dec. 6		Dec. 6		Dec. 6		
0. 0	21. 15. 30	0. 0	·0990	0. 0	·02242	0. 0	53 ·7	53 ·1
0. 14	13. 30	1. 0	·0999	9. 10	·01940	1. 0	54 ·3	53 ·7
0. 49	13. 45	1. 42	·0995	22. 29	·02210	3. 0	55 ·8	54 ·5
1. 12	16. 20	2. 16	·0998	23. 59	·02224	9. 0	56 ·2	54 ·5
2. 13	14. 20	2. 36	·0994			21. 0	52 .8	52 ·7
3. 53	13. 40	7. 15	·1006					
6. 11	10. 20	12. 15	·1008					
20. 52	9. 50	17. 17	·1013					
23. 59	15. 30	19. 52	·1011					
		22. 3	·1000					
			***					
		23. 59	·0998					
Dec. 7		Dec. 7		Dec. 7		Dec. 7		
0. 0	21. 15. 30	0. 0	·0998	0. 0	·02224	1. 0	54 ·7	53 ·9
0. 37	14. 0	0. 26	·0995	3. 12	·02140	3. 0	56 ·1	55 ·0
1. 12	15. 55	0. 50	·0999	7. 29	·01827	9. 0	56 ·9	55 ·7
2. 30	17. 0	2. 32	·0991	12. 0	{ ·01744 ·01925	21. 8	52 ·0	52 ·2
3. 10	15. 30	3. 15	·0997					
10. 11	12. 10	3. 56	·0994	14. 40	·01922			
21. 12	10. 45	18. 6	·1011	23. 59	·02210			
23. 21	15. 45	19. 50	·1010					
23. 52	16. 0	23. 59	·0994					
23. 59	15. 15							
Dec. 8		Dec. 8		Dec. 8		Dec. 8		
0. 0	21. 15. 15	0. 0	·0994	0. 0	·02210	1. 0	54 ·0	54 ·0
0. 10	14. 30	1. 47	·0993	0. 41	·02200	3. 0	54 ·7	55 ·0
0. 24	14. 50	4. 13	·0993	3. 17	·02117	9. 0	55 ·3	54 ·6
0. 37	16. 30	7. 50	·1011	5. 11	·01946	21. 12	51 ·0	51 ·0
1. 27	17. 0	9. 20	·1001	6. 52	·01867			
7. 0	12. 10		***	8. 0	·01861			
9. 26	13. 30	18. 46	·1017	8. 22	·01900			
15. 31	8. 40		***	13. 41	·01911			
15. 57	10. 20	20. 17	·1014	23. 59	·02273			
16. 15	9. 50	20. 45	·1011					
16. 45	11. 0	22. 15	·1013					
20. 49	9. 50	22. 47	·0994					
21. 45	11. 5	23. 18;	·1003					
23. 59	16. 0	23. 59	·0997					
Dec. 9		Dec. 9		Dec. 9		Dec. 9		
0. 0	21. 16. 0	0. 0	·0997	0. 0	·02273	6. 41	51 ·4	51 ·2
0. 40	18. 0		***	1. 29	·02306	21. 0	58 ·0	58 ·3
1. 45	15. 30	0. 47	·0993	4. 41	·02240			
2. 9	18. 20		***	11. 45	·02279			
2. 45	17. 25	1. 46	·0997	23. 59	·02612			
3. 10	15. 20		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 9		Dec. 9						
h m	° ′ ″	h m		h m			°	°
3. 23	21. 17. 30	2. 45	·0997					
3. 33	15. 30	3. 17	·1003					
3. 45	22. 30	4. 0	·1001					
4. 34	14. 0	4. 7	·1012					
5. 15	14. 20	4. 26	·1003					
5. 43	17. 30	5. 0	·1013					
5. 55	15. 5		***					
6. 27	15. 10	5. 25	·1012					
7. 51	11. 0	5. 44	·1005					
9. 14	10. 10	7. 20	·1016					
11. 23	11. 0	8. 18	·1018					
13. 45	7. 0		***					
15. 42	8. 10	10. 5	·1014					
16. 10	9. 40	10. 42	·1023					
16. 54	9. 20		***					
17. 0	12. 0	11. 46	·1018					
17. 30	7. 20	12. 30	·1005					
20. 22	9. 0	13. 21	·1010					
20. 55	12. 20		***					
21. 1	10. 50	16. 37	·1011					
21. 11	12. 0	17. 45	·1024					
21. 15	10. 40		***					
22. 18	16. 20	19. 27	·1025					
23. 19	18. 40	21. 7	·1013					
23. 48	17. 10	22. 5	·0995					
23. 59	18. 15	22. 33	·0994					
			(†)					
Dec. 10		Dec. 10		Dec. 10		Dec. 10		
0. 0	21. 18. 15		(†)	0. 0	·02612	1. 0	49 ·0	50 ·0
0. 24	18. 0	0. 47	·1025	1. 47	·02591	3. 0	52 ·0	52 ·0
0. 39	24. 0		***	4. 57	.02330	9. 0	52 ·3	52 ·2
1. 3	16. 50	1. 20	·1016	5. 27	·02323	21. 0	46 ·3	47 ·2
1. 11	21. 10	1. 37	·1019	6. 10	·02266			
1. 25	20. 15	1. 46	·1016	6. 51	·02242			
1. 33	23. 30	2. 5	·0995	8. 43	·02012			
1. 40	22. 10		***	12. 40	·02012			
1. 58	28. 20	2. 18	·0976	13. 22	·01940			
2. 27	29. 0	2. 37	·0980	13. 42	·01983			
2. 53	26. 50	3. 2	·0974	14. 53	·01953			
3. 13	24. 30	3. 33	·0988	15. 12	·02011			
3. 44	26. 30		***	15. 29	·01953			
4. 26	21. 35	4. 5	·0979	20. 13	·02240			
4. 42	23. 30	4. 36	·0989	23. 59	·02550			
4. 56	25. 0	4. 55	·0972					
5. 11	23. 0		***					
5. 26	23. 35	5. 17	·0981					
5. 57	16. 30		***					
6. 16	15. 30	5. 40	·0971					
6. 41	7. 40		***					
6. 57	9. 40	6. 5	·0978					
7. 44	21. 8. 0	6. 26	·0960					
8. 10	20. 56. 0	6. 40	·0968					
8. 21	21. 4. 0		***					
8. 35	20. 59. 30	7. 38	·0967					
8. 43	21. 1. 30	8. 0	·0976					
8. 58	20. 52. 10	8. 12	·0998					
9. 10	21. 2. 30	8. 37	·0987					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 10		Dec. 10						
h m	° ′ ″	h m		h m		h m	°	°
9.41	21. 1.40	8.46	·0964					
9.47	20.59.30	9. 5	·1001					
9.56	21. 2.20	9.17	·0966					
10.11	20.59.15	9.37	·0977					
10.29	21. 2.30	9.43	·0972					
10.42	1.15	9.50	·0980					
10.53	21. 1.10	10. 5	·0972					
11.25	20.53.40		***					
11.45	59.20	10.40	·0978					
12. 7	20.57.40	10.46	·0974					
12.39	21. 7. 0	11. 0	·0981					
13.15	20.51. 0	11. 7	·0974					
13.19	51.30	11.16	·0976					
13.27	51. 5	11.40	·0964					
13.56	20.54.30	11.52	·0969					
14.15	21. 4.30	12.15	·0958					
14.30	9. 0	12.36	·0974					
14.58	2.20	13. 4	·0987					
15.20	15.30	13.31	·0975					
15.37	12.30	13.42	·0976					
15.45	14.20	14. 8	·0965					
16.30	3.30	14.17	·0986					
16.42	10.50	14.42	·0999					
16.59	10.30	15. 0	·0966					
17.50	15.50	16.16	·1023					
17.53	15.20		***					
18.12	18.20	17.13	·1007					
18.31	18. 5	17.45	·0985					
18.52	14.20	18.11	·0997					
19. 8	17.30	18.33	·0979					
19.24	15.20		***					
19.42	21.10	19.46	·0985					
20.25	13.40		***					
20.54	19. 0	20.17	·0975					
21. 9	18.30		***					
21.19	19.30	21.26	·0974					
21.45	17. 5	21.35	·0987					
21.58	19.30	21.42	·0982					
22.11	16. 0	21.50	·0989					
22.27	21. 0	22. 6	·0983					
	***	22.33	·0982					
23.42	18.55	22.45	·0977					
23.59	22.10	23. 3	·0981					
		23. 8	·0977					
		23.15	·0983					
			(†)					
Dec. 11		Dec. 11		Dec. 11		Dec. 11		
0. 0	21.22.10		(†)	0. 0	·02550	1. 0	48·2	48·6
0.17	20.30	1.42	·0985	2.12	·02608	3. 0	49·6	50·3
0.25	21.40	2. 5	·0978	12.14:	·02113	9. 0	51·6	51·5
0.31	20.30	2.17	·0988	21.27	·02410	21. 0	47·0	47·7
0.41	21.25	2.42	·0985	23.59	·02469			
0.53	19.40	2.50	·0978					
1.54	19.30	3.36	·0988					
2.13	14.35	3.52	·0977					
2.43	19.10	4. 4	·0976					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 11		Dec. 11						
h m	° ′ ″	h m		h m		h m	°	°
3.15	21.16.35	4.15	·0983					
3.42	17.30	4.40	·0988					
4.17	13.15	5. 0	·0977					
4.42	15. 0	5.47	·0984					
4.55	13.40	6.35	·0988					
5.40	12.40		***					
6.50	13.45	8. 2	·0999					
7.42	11.20	8.21	·0992					
8.42	10.40	9.47	·0992					
8.56	11.30	10.20	·1011					
10. 9	0.20	10.40	·0991					
10.29	7.30	11. 6	·1003					
10.40	7.30	11.33	·0998					
10.55	10.40	12.38	·0999					
11.18	8.30	17.36	·1007					
11.59	12.10	20. 0	·1003					
20.16	9.50	22.15	·0991					
23. 4	16. 0	23.59	·0991					
23.59	16.30							
Dec. 12		Dec. 12		Dec. 12		Dec. 12		
0. 0	21.16.30	0. 0	·0991	0. 0	·02469	0. 0	48·5	48·4
3.54	16.35	6.25	·0992	7.12	·01964	1. 0	48·4	49·[illegible]
7. 7	13.40	12.34	·0999	9. 0	·0193[illegible]	3. 0	51·0	51·5
10.56	11.45	18.25	·1012	9.21	·02042	6. 0	51·2	52·0
19.21	10.40	23.59	·0994	14.27:	·02061	9. 0	49·[illegible]	51·[illegible]
20.20	9.20			23. 9	·02429	12. 0	49·0	50·5
22.30	13.40			23.59	·02426	18. 0	46·5	47·0
23.22	16.10					21. 0	46·4	47·5
23.59	15.45							
Dec. 13		Dec. 13		Dec. 13		Dec. 13		
0. 0	21.15.50	0. 0	·0994	0. 0	·02426	0. 0	47·8	48·2
0.13	16.40	1. 0	·0994*	6.55	·020[illegible]	1. 0	48·2	49·0
0.45	13.50	3. 0	·0993*	8.28	·02070	3. 0	50·0	51·3
0.55	15.50	9.40	·1004*	22.40	·02524	9.40	49·2	50·0
1. 7	15.30	21. 0	·1006*	23.59	·02523	21. 0	45·2	47·0
2. 0	16.50							
6.15	11.20							
10. 7	9.30							
15.34	11. 0							
20.22	9.45							
23.41	16.40							
	(†)							
Dec. 14		Dec. 14		Dec. 14		Dec. 14		
	(†)	0. 0	·0997	0. 0	·02523	1. 0	48·2	48·5
0.40	21.15.30	1.47	·1003	6.41	·02170	3. 0	49·5	4[illegible]
2.37	16.10	5. 5	·1006	11.27	·02100	9. 0	47·7	49·5
6.13	12.20	7. 0	·100[illegible]	11.52	·0218[illegible]	21. 0	43·5	45·5
7.12	13.10	7.21	·1005	13.50	·02210			
7.43	10. 5	7.42	·1009	22.37	·02695			
8.21	12. 5	8.13	·1005	23.59	·02674			
10.44	9. 5	8.40	·1006					
13.10	11.45	9.17	·1002					
20.40	8.40		***					
23.59	15.15	17.34	·1027					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

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		Dec. 14						
h m	° ′ ″	h m		h m		h m	°	°
		19. 53	·1025 ***					
		23. 59	·1007					
Dec. 15		Dec. 15		Dec. 15		Dec. 15		
0. 0	21. 15. 15	0. 0	·1007	0. 0	·02674	1. 0	45 ·8	46 ·1
2. 57	15. 10	0. 48	·0996	1. 40	·02693	3. 0	47 ·3	47 ·4
3. 12	13. 10	1. 16	·0999	6. 44	·02469	9. 0	46 ·7	47 ·1
3. 22	13. 35	2. 45	·1000	10. 42	·02430	22. 27	43 ·7	45 ·8
5. 43	10. 40	3. 17	·1005	11. 31	·02380			
8. 54	9. 0	7. 25	·1015	12. 1	·02461			
9. 45	9. 15	8. 47	·1016	12. 36	·02428			
	(†)		(†)	13. 0	·02329			
11. 11	13. 40	9. 0	·1020*	13. 43	·02335			
11. 39	13. 20	10. 42	·1043	14. 0	·02384			
11. 51	10. 20	10. 46	·1046	14. 20	·02370			
12. 7	13. 0	11. 5	·1036	15. 56	·02490			
12. 40	6. 50	11. 32	·0972	23. 59	·02705			
12. 44	7. 40	11. 55	·0990					
12. 57	1. 40		***					
13. 26	2. 30	12. 42	·0953					
13. 40	0. 45	13. 17	·0960					
13. 55	3. 0	13. 33	·0953					
14. 2	1. 30	13. 46	·0967					
14. 44	6. 25	14. 5	·0960					
15. 6	1. 30	14. 17	·0962					
15. 19	1. 50	14. 37	·0955					
15. 36	5. 30	14. 48	·0959					
16. 11	5. 50	15. 30	·0982					
16. 45	8. 10	15. 42	·0977					
17. 19	11. 40		***					
17. 28	11. 0	16. 37	·0983					
17. 43	11. 40	17. 15	·0993					
20. 22	10. 50	18. 33	·0993					
20. 37	9. 10		***					
20. 51	8. 45	19. 45	·1003					
21. 21	10. 10	20. 12	·1003					
21. 36	7. 15	20. 20	·1000					
21. 45	10. 45	20. 46	·1005					
21. 54	10. 0	21. 7	·1001					
22. 12	12. 30	21. 17	·1006					
22. 27	10. 25	21. 20	·1000					
22. 36	12. 30	21. 41	·1008					
23. 9	13. 0	21. 45	·1001					
	(†)	22. 6	·1020					
			(†)					
Dec. 16		Dec. 16		Dec. 16		Dec. 16		
	(†)		(†)	0. 0	·02705	10. 13	45 ·0	47 ·0
0. 38	21. 14. 30	0. 57	·0992	1. 10	·02750	21. 9	42 ·0	43 ·2
0. 42	13. 40		***	5. 45	·02509			
1. 8	16. 40	1. 30	·0994	7. 28	·02560			
1. 24	16. 0	1. 46	·1009	7. 42	·02538			
1. 54	17. 45	2. 3	·0989	7. 51	·02569			
2. 12	20. 30	2. 15	·0997	8. 4	·02545			
2. 28	18. 40	2. 22	·0991	8. 20	·02570			
2. 42	19. 30	2. 32	·0995	9. 0	·02530			
4. 45	13. 50	2. 45	·0992	9. 12	·02570			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 16		Dec. 16		Dec. 16				
h m	° ′ ″	h m		h m		h m	°	°
5. 42	21. 13. 20	2. 58	·1000	9. 30	·02484			
5. 58	14. 45	3. 7	·0994	10. 14	·02428			
6. 18	14. 0	3. 16	·0998	10. 51	·02470			
6. 27	14. 45	3. 34	·0993	12. 9	·02466			
6. 44	10. 50	3. 46	·1002	12. 43	·02505			
7. 9	15. 30	4. 4	·0993	13. 4	·02498			
7. 19	12. 30	4. 33	·0999	18. 49	·02738			
7. 46	10. 15	4. 37	·1006	23. 59	·02797			
7. 55	11. 20	4. 46	·0999					
8. 15	3. 40	5. 13	·1000					
	***	5. 23	·1014					
8. 43	11. 0	5. 42	·0997					
8. 52	10. 30	6. 0	·0990					
9. 9	12. 5	6. 18	·0976					
9. 18	21. 8. 30		***					
9. 37	20. 50. 30	6. 37	·0980					
9. 51	55. 10	6. 46	·0969					
10. 0	20. 50. 20		***					
10. 16	21. 6. 0	7. 5	·0977					
10. 45	20. 57. 20	7. 15	·0971					
11. 35	21. 0. 10	7. 26	·0979					
12. 22	12. 20	7. 42	·0969					
12. 37	9. 30	7. 50	·0990					
13. 19	12. 50	8. 3	·0974					
13. 43	11. 40		***					
14. 29	12. 20	8. 26	·0970					
14. 45	14. 10	8. 42	·0977					
15. 7	12. 0	8. 47	·0974					
15. 52	10. 0	8. 52	·0984					
17. 56	12. 0	9. 5	·0963					
20. 28	9. 0	9. 17	·1008					
	***	9. 33	·0982					
21. 44	13. 0	9. 40	·0991					
	***	10. 2	·0970					
22. 55	12. 20	10. 18	·0967					
23. 59	14. 30	10. 47	·0981					
		11. 6	·0972					
		11. 30	·0987					
		11. 47	·1001					
		12. 15	·0988					
		12. 40	·1005					
		12. 56	·0998 ***					
		15. 45	·1003					
		16. 25	·1007					
		19. 12	·1009 ***					
		20. 47	·1012 ***					
		23. 59	·0996					
Dec. 17		Dec. 17		Dec. 17		Dec. 17		
0. 0	21. 14. 35	0. 0	·0996	0. 0	·02797	1. 0	44 ·5	45 ·0
1. 10	14. 45	1. 46	·0995	2. 0	·02740	3. 0	46 ·0	46 ·5
1. 19	18. 20	2. 10	·1001	8. 24	·02393	9. 0	45 ·5	47 ·0
1. 31	16. 30	2. 18	·0990	12. 25	·02338	21. 0	38 ·2	41 ·0
2. 22	15. 50	3. 2	·0997 ***	20. 0	·02690			
3. 2	17. 0			21. 54	·02828			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 17		Dec. 17		Dec. 17				
h m	° ′ ″	h m		h m		h m	°	°
4. 36	21. 13. 30	3. 27	·0989	23. 59	·02869			
5. 6	15. 15	5. 3	·0994					
6. 41	14. 20	5. 18	·0991					
8. 15	11. 10	6. 22	·0995					
9. 16	11. 50		***					
9. 42	10. 30	9. 28	·0991					
11. 39	11. 30	9. 45	·0995					
11. 58	13. 10		***					
12. 39	8. 25	11. 38	·1001					
13. 43	10. 20	12. 0	·1008					
13. 55	9. 15	12. 17	·1003					
14. 21	9. 10		***					
14. 47	11. 50	14. 10	·0999					
17. 35	11. 30	17. 34	·1011					
18. 10	10. 5	20. 20	·1010					
19. 0	11. 10	21. 41	·1002					
20. 35	10. 50	21. 48	·1007					
22. 0	13. 50	22. 56	·1004					
22. 30	17. 30	23. 9	·1009					
22. 57	18. 0	23. 33	·1001					
23. 22	21. 20	23. 59	·1002					
23. 43	18. 40							
23. 59	18. 55							
Dec. 18		Dec. 18		Dec. 18		Dec. 18		
0. 0	21. 18. 55	0. 0	·1002	0. 0	·02869	1. 0	40·0	41·0
0. 26	20. 35	1. 26	·0998	2. 14	·02890	3. 0	42·2	43·0
	(†)	2. 8	·1004	10. 15:	·02470	9. 0	43·0	43·0
1. 0	21. 1*	3. 17	·1008	19. 55	·02927	21. 0	34·5	37·0
1. 7	18. 40	4. 35	·1000	21. 51	{·02930 ·02968			
1. 54	16. 50		***					
3. 10	16. 10	7. 3	·1004	23. 6	·03000			
4. 18	16. 50	7. 17	·1001	23. 25	·02978			
6. 55	12. 40	7. 56	·1005	23. 59	·02980			
7. 25	10. 50	8. 30	·1011					
7. 44	11. 20	9. 23	·1007					
8. 19	7. 45		***					
9. 9	12. 10	10. 45	·1005					
12. 25	10. 25	12. 26	·1015					
12. 54	7. 0	13. 35	·1010					
13. 46	10. 10		***					
19. 45	11. 0	15. 14	·1010					
	(†)		***					
21. 0	10. 58*	19. 51	·1019					
			(†)					
Dec. 19		Dec. 19		Dec. 19		Dec. 19		
	(†)		(†)	0. 0	·02980	0. 0	36·0	38·0
0. 38	21. 19. 0	1. 0	·1018*	4. 54	·02622	1. 0	37·6	39·0
0. 54	17. 45	1. 45	·1011	8. 49	·02340	3. 0	40·2	41·0
1. 22	19. 30	2. 50	·1008	15. 5	·02200	6. 0	42·4	42·6
1. 37	18. 45	3. 44	·1013	18. 52	·02250	9. 0	42·5	42·5
1. 54	19. 40	3. 50	·1009	21. 30	·02330	12. 0	42·7	42·8
3. 15	16. 45	4. 5	·1014	23. 18	·02512	18. 0	35·0	35·3
3. 30	17. 30		***	23. 59	·02540	21. 5	38·0	39·0
3. 55	16. 50	4. 44	·1005					
4. 29	18. 45	5. 7	·0988					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Dec. 19		Dec. 19						
h m	° ′ ″	h m		h m		h m	°	°
5. 0	21. 8. 50	5. 35	·0999					
5. 21	13. 50	5. 56	·1000					
5. 45	15. 10	6. 17	·1008					
6. 14	15. 20	6. 32	·1005					
6. 30	14. 0	6. 47	·1009					
6. 54	14. 50		***					
7. 21	13. 40	7. 34	·1006					
9. 27	14. 20		***					
10. 29	11. 20	8. 58	·1011					
11. 52	13. 15	9. 12	·1003					
12. 29	11. 15	9. 18	·1016					
12. 39	11. 50	9. 35	·1010					
12. 55	7. 0	9. 48	·1018					
13. 15	7. 40		***					
13. 30	6. 25	11. 17	·1003					
13. 42	8. 55		***					
14. 9	5. 20	12. 46	·1011					
14. 42	14. 0	13. 7	·1025					
16. 0	9. 0	13. 20	·1015					
16. 59	12. 10	13. 47	·1025					
17. 51	10. 45		***					
18. 19	12. 0	15. 2	·1004					
18. 44	11. 20		***					
19. 37	14. 30	16. 30	·1022					
	***		***					
21. 52	18. 20	17. 38	·1014					
22. 21	21. 30	18. 7	·1018					
23. 10	19. 5		***					
23. 41	20. 15	18. 45	·1014					
	(†)	19. 6	·1016					
		20. 4	·1008					
		21. 16	·1010					
			***					
		22. 18	·0999					
			***					
		23. 59	·1013					
Dec. 20		Dec. 20		Dec. 20		Dec. 20		
	(†)	0. 0	·1013	0. 0	·02540	0. 0	38·0	39·5
0. 43	21. 20. 10	2. 17	·1005	2. 41	·02528	1. 0	39·0	40·2
0. 54	20. 20	5. 18	·1009	6. 21	·02300	3. 0	41·0	42·0
1. 22	18. 30		***	8. 57	·02208	9. 0	40·8	43·0
4. 37	15. 15	6. 5	·1006	11. 55	·02200	21. 0	35·8	38·0
5. 52	16. 0	6. 18	·0997	23. 59	·02737			
6. 12	14. 30	6. 37	·0998					
6. 54	0. 25	6. 55	·1021					
7. 28	11. 50	7. 17	·1012					
8. 29	13. 15	7. 28	·1002					
9. 40	8. 5	7. 37	·1008					
10. 7	6. 15		***					
10. 32	11. 45	9. 46	·1004					
10. 54	10. 50	10. 17	·1019					
11. 0	11. 40		***					
11. 21	10. 30	11. 18	·1005					
11. 40	12. 10	11. 40	·1011					
16. 21	10. 50		***					
18. 56	11. 50	16. 20	·1022					
	(†)		***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Q 2

Greenwich Mean Solar Time.	Western Declination.
h m	° ′ ″
Dec. 20	
21. 0	21. 8. 14*
Dec. 21	
	(†)
1. 0	21. 17. 5*
1. 15	13. 20
1. 54	11. 55
2. 1	12. 40
3. 10	9. 10
4. 15	11. 50
6. 55	10. 20
7. 29	5. 5
7. 39	6. 10
7. 51	2. 30
8. 47	9. 0
10. 1	8. 20
10. 26	5. 50
10. 40	6. 40
11. 0	4. 45
11. 12	6. 20
12. 30	9. 20
13. 23	9. 35
13. 40	8. 40
13. 46	10. 10
14. 39	9. 30
14. 58	7. 30
15. 12	7. 20
15. 45	9. 40
16. 0	12. 30
16. 27	12. 0
16. 45	13. 20
17. 21	10. 20
17. 54	10. 35
19. 22	13. 10
20. 58	13. 10
21. 12	11. 50
21. 15	13. 15
21. 24	11. 40
21. 40	13. 15
22. 21	13. 0
23. 22	15. 30
	(†)
Dec. 22	
	(†)
0. 30	21. 15. 0
1. 12	13. 20
1. 27	14. 0
3. 48	10. 50
4. 21	8. 50
5. 46	11. 10
6. 54	8. 10
7. 27	9. 40
7. 45	8. 50
7. 54	9. 0
8. 43	6. 0
9. 2	20. 58. 45
9. 39	21. 6. 20
11. 0	5. 10
11. 59	8. 20
14. 18	11. 15
17. 57	10. 50
19. 25	11. 45
20. 56	11. 0
21. 30	13. 20
23. 13	11. 50
23. 59	13. 30
Dec. 23	
0. 0	21. 13. 30
0. 19	13. 50
0. 42	12. 55
1. 58	13. 45
2. 40	11. 40
4. 10	10. 0
5. 11	11. 25
5. 30	6. 25
5. 43	9. 30
6. 36	10. 40
8. 13	8. 20
8. 36	8. 40
8. 58	6. 40
9. 15	8. 20
9. 29	7. 45
9. 42	8. 10
9. 57	6. 15
10. 50	9. 10
11. 14	7. 45
11. 52	9. 50
15. 11	12. 10
22. 28	11. 45
22. 45	13. 30
23. 59	13. 0
Dec. 24	
0. 0	21. 13. 0
	***
2. 45	12. 40
3. 22:	8. 30
4. 7	10. 35
7. 30	10. 40
7. 57	9. 10
8. 28	10. 10
11. 1	11. 10
11. 30	10. 30
14. 12	12. 20
15. 9	11. 40
16. 45	12. 40
20. 9	11. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
Dec. 20	
19. 8	·1022
	(†)
21. 0	·1015*
Dec. 21	
	(†)
1. 0	·1000*
1. 45	·0999
2. 7	·0997
2. 45	·0999
2. 49	·0995
	***
7. 34	·1001
7. 45	·0996
8. 16	·1015
8. 44	·0999
	***
10. 22	·1010
10. 47	·1017
	***
11. 36	·1018
11. 48	·1013
	***
14. 39	·1013
15. 4	·1018
15. 20	·1015
	***
16. 34	·1019
16. 56	·1015
17. 26	·1024
	***
19. 7	·1023
	***
19. 56	·1020
	***
21. 45	·1001
	***
22. 17	·1007
	***
23. 16	·1002
23. 59	·1002
Dec. 22	
0. 0	·1002
1. 4	·0995
	***
1. 47	·0998
2. 18	·0992
3. 6	·0997
3. 32	·0992
5. 0	·0998
5. 50	·0990
7. 36	·0993
8. 42	·0987
9. 3	·1004
9. 17	·1008
10. 5	·0993
10. 17	·0993
10. 46	·1001
11. 8	·0999
	***
18. 15	·1020
	***
21. 35	·1017
	***
22. 40	·1007
23. 59	·1005
Dec. 23	
0. 0	·1005
2. 47	·1001
3. 34	·0997
3. 45	·1000
	***
4. 17	·0996
5. 16	·1001
5. 47	·0985
6. 8	·0991
6. 16	·0987
6. 45	·0996
8. 45	·1004
9. 12	·1001
9. 33	·1006
9. 50	·1002
10. 20	·1013
	***
11. 46	·1012
12. 16	·1017
12. 46	·1014
	***
15. 30	·1016
15. 46	·1020
20. 15	·1021
21. 47	·1018
23. 0	·1010
23. 26	·1012
23. 59	·1010
Dec. 24	
0. 0	·1010
0. 7	·1012
1. 0	·1008*
3. 0	·0996*
9. 40	·1019*
22. 30	·1012*

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Dec. 21	
0. 0	·02737
1. 40	·02636
4. 44	·02292
5. 45	·02217
10. 54	·02091
23. 15	·02420
23. 59	·02405
Dec. 22	
0. 0	·02405
2. 21	·02284
3. 7	·02222
3. 14	·02236
6. 36	·01909
7. 25	·01874
8. 24	·01891
8. 41	·01938
9. 53	·01907
14. 20	·01984
21. 44	·02477
23. 59	·02686
Dec. 23	
0. 0	·02686
1. 15	·02670
9. 59:	·02206
22. 27	·02797
23. 59	·02804
Dec. 24	
0. 0	·02804
9. 13:	·02410
20. 0	·03000
22. 50	·03052
	(†)

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Dec. 21		
1. 0	39 ·0	40 ·0
3. 0	42 ·5	42 ·7
9. 0	42 ·2	42 ·1
21. 0	38 ·3	39 ·2
Dec. 22		
1. 0	41 ·0	41 ·3
3. 0	44 ·0	43 ·4
9. 0	45 ·8	47 ·0
22. 33	36 ·0	38 ·5
Dec. 23		
8. 33	40 ·8	41 ·5
21. 0	34 ·0	35 ·7
Dec. 24		
1. 0	37 ·3	37 ·2
3. 0	39 ·0	39 ·5
9. 40	36 ·5	36 ·8
22. 30	29 ·0	30 ·0

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Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 24								
h m	° ′ ″	h m		h m		h m	°	°
22.12	21.15.45							
22.58	15.30							
	(†)							
Dec. 25		Dec. 25		Dec. 25		Dec. 25		
7.30	21. 2.50*	7.30	·1010*		(†)	7.30	31·5	33·0
21.10	10. 7	21.10	·1014*	0.30	·02880	21.10	33·0	34·4
				2.43	·02928			
				6.30	·02789			
				8.39	·02769			
				10.27	·02657			
				11. 7	·02673			
				16.23	·02590			
				21.13	·02565			
				22.55	·02613			
				23.59	·02550			
Dec. 26		Dec. 26		Dec. 26		Dec. 26		
	(†)		(†)	0. 0	·02550	0. 0	35·0	36·3
0.58	21.14.15	1. 0	·1004*	3. 5	·02320	1. 0	36·7	38·0
2.26	15.30	1.56	·1005	6. 9	·01938	3. 0	39·8	40·7
3.14	8.45	2.12	·1005	7.52	·01992	6. 0	42·0	41·4
3.44	12.20	3.26:	·0992	16.22	·02003	9. 0	41·8	42·3
5.14	9.35	3.56	·1000	23.59	·02193	12. 0	42·1	42·5
6.23	9.40	4.33	·0999			21. 0	37·7	38·3
7. 8	7.45	6. 3	·1006					
7.29	5.25		***					
8.20	8.20	8.27	·0994					
10.41	9.10		***					
11.54	8.30	11.42	·1006					
12.25	10. 5		***					
12.45	8.50	12.38	·1002					
12.51	9. 0		***					
13.21	8.15	13.45	·1012					
13.40	10. 0	15.17	·1011					
16.11	11.40	16. 7	·1016					
18.40	11.35	19.26	·1022					
20.29	10.35	20.36	·1022					
22. 0	12. 0	21.47	·1013					
	(†)	23.59	·1009					
Dec. 27		Dec. 27		Dec. 27		Dec. 27		
	(†)	0. 0	·1009	0. 0	·02193	0. 0	38·9	39·7
0.20	21.12. 0	1.17	·0996	1.39	·02228	1. 0	39·0	40·0
2.21	14.15	2.32	·0999	5.38	·02000	3. 0	41·0	42·2
3.11	13.30	3.45	·0997	5.52	·02030	9. 0	42·0	41·7
4.10	9.20	4.18	·1001	15.42	·02020	21. 0	39·0	40·3
4.44	10.50	4.47	·1000	23.59	·02157			
5.14	8.45	5.58	·1006					
5.41	10.50	6.45	·1001					
7.21	9.55	8.17	·1002					
7.41	8.45	8.46	·1005					
7.54	9.10	9.47	·1004					
8.43	6.45	10.15	·1008					
8.59	8.50	13.46	·1010					
9.37	9.15	18.47	·1017					
10. 6	8.40		***					
10.28	10. 0	22.54	·1012					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 27		Dec. 27						
h m	° ′ ″	h m		h m		h m	°	°
11. 9	21. 8.20	23.47	·1006					
11.24	9.50	23.59	·1007					
13.39	9.20							
15.52	11.30							
20.55	10.40							
22.12	11.30							
	(†)							
Dec. 28		Dec. 28		Dec. 28		Dec. 28		
	(†)	0. 0	·1007	0. 0	·02157	1. 0	41·5	41·8
2.44	21.11.20	1.43	·1004	3.21	·02037	3. 0	43·2	43·1
4.15	9.40	4.17	·0997		·02142	9. 0	44·0	43·5
4.39	10.20	9. 7	·0999	13. 5	·02255	21. 0	33·0	34·7
5. 8	9.40	9.20	·0997	16.13	·02422			
5.26	10.15	9.37	·0999	21.19	·02870			
8.15	7.50	10.12	·0997	23.34	·03120			
8.47	8.20		***	23.59	·03117			
9.45	7.55	14.30	·1013					
10.42	9. 0		***					
10.57	7.50	16.12	·1021					
12.15	9.10	19.58	·1023					
17.22	10.40	23.59	·1019					
17.47	10.10							
21. 0	11. 0							
22. 2	11.53							
	(†)							
Dec. 29		Dec. 29		Dec. 29		Dec. 29		
	(†)	0. 0	·1019	0. 0	·03117	1. 0	35·3	36·0
2. 9	21.12.50	1. 6	·1018	2.13	·03092	3. 0	38·2	37·5
2.45	12.20	1.25	·1013	6.52:	·02752	9. 0	37·5	38·3
2.57	11.10	3. 3	·1009	14.27	·02770	22.55	36·7	38·3
7.21	9.45	3.54	·1017	23.59	·02882			
15. 0	10.35	4.45	·1014					
19.57	10. 0	8. 7	·1019					
	***	8.34	·1016					
23.39	13.45	9.40	·1020					
23.59	13.20	15.17	·1025					
		18.36	·1028					
			***					
		23.59	·1023					
Dec. 30		Dec. 30		Dec. 30		Dec. 30		
0. 0	21.13.20	0. 0	·1023	0. 0	·02882	6.42	43·0	43·3
0.51	13.40	3.38	·1005	2.17	·02912	21. 0	41·8	43·7
2.15	11.40	6.17	·1013	9.26:	·02388			
3.42	12.15	11.43	·1009	18.13	·02299			
4.15	11.10	17.26	·1017	22.30	·02421			
4.39	11.50	23.59	·1001	23.59	·02409			
5.22	10.50							
8.13	9.50							
12.42	10. 0							
13. 7	9.30							
15.14	10.40							
17.41	9.35							
18. 0	10.20							
18.56	9.40							
19.12	10.10							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 30								
h m	° ′ ″	h m		h m		h m	°	°
19. 22	21. 9. 40							
20. 21	10. 40							
22. 28	12. 20							
	(†)							
		Dec. 31		Dec. 31		Dec. 31		
		0. 0	·1001	0. 0	·02409	1. 0	44·0	45·0
		1. 53	·1000	1. 30	·02370	3. 0	46·0	46·0
		3. 23	·0989	5. 42	·02090	9. 0	46·7	46·0
		4. 4	·0995	8. 47	·01994	21. 0	46·6	47·2
		5. 17	·1000	10. 44	·02028			
		5. 45	·0997	3. 28	·02003			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Dec. 31		Dec. 31				
h m	° ′ ″	h m		h m		h m	°	°
		7. 11	·1009 ***	19. 13:	·02174			
				23. 59	·02110			
		8. 18	·0991					
		9. 20	·0996					
		9. 42	·0992					
		10. 0	·0995					
		10. 26	·0987					
		10. 42	·0993					
		13. 2	·0996					
		16. 45	·1008 ***					
		18. 32	·1009					
		23. 59	·0994					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

December 31. The Declination Magnet was under adjustment.

ROYAL OBSERVATORY, GREENWICH.

RESULTS
OF
OBSERVATIONS
OF THE
MAGNETIC DIP.

1860.

During the year 1860, the observations of the Magnetic Dip were made with the instrument by Robinson used in preceding years, and described in the volume of *Greenwich Magnetical and Meteorological Observations* for 1847, and in preceding volumes. With this instrument are used four nine-inch needles, two of which, marked A and A 2, were made by Barrow, and two, marked A 1 and A 3, were made by Dent. In the tabular statement of the values of the Magnetic Dip these needles are called Barrow A and Barrow A 2, and Dent A 1 and Dent A 3.

MAGNETIC DIP, observed at the ROYAL OBSERVATORY, GREENWICH, in the YEAR 1860.

Day and Approximate Hour, 1860.	Needle.	Magnetic Dip.	Observer.
d h		° ′	
January 17. 1	Dent A 1	68. 24 ·00	T D
18. 23	,, A 3	68. 26 ·25	T D
26. 21	Barrow A 2	68. 32 ·75	T D
30. 22	,, A	68. 30 ·25	T D
February 6. 21	Dent A 1	68. 25 ·25	T D
9. 21	Barrow A 2	68. 35 ·75	T D
13. 22	Dent A 3	68. 27 ·00	T D
16. 1	,, A 1	68. 24 ·75	T D
22. 1	Barrow A	68. 29 ·00	T D
28. 23	,, A 2	68. 35 ·50	T D
March 3. 22	Dent A 3	68. 30 ·00	T D
6. 1	,, A 1	68. 28 ·00	T D
8. 1	Barrow A	68. 18 ·75	T D
12. 21	Dent A 1	68. 26 ·75	T D
15. 0	Barrow A 2	68. 34 ·75	T D
17. 1	Dent A 3	68. 27 ·75	T D
19. 22	,, A 1	68. 30 ·50	T D
22. 22	Barrow A 2	68. 37 ·00	T D
26. 23	Dent A 1	68. 30 ·00	T D
28. 23	Barrow A 2	68. 35 ·00	T D
April 2. 23	Dent A 3	68. 27 ·50	T D
5. 1	Barrow A 2	68. 35 ·75	T D
10. 22	Dent A 1	68. 31 ·00	T D
12. 23	,, A 3	68. 28 ·00	T D
16. 22	,, A 1	68. 29 ·25	T D
18. 23	Barrow A 2	68. 32 ·25	T D
24. 23	Dent A 1	68. 18 ·75	T D
26. 22	Barrow A 2	68. 32 ·50	T D
30. 22	Dent A 3	68. 28 ·00	T D
May 3. 0	Dent A 1	68. 25 ·50	T D
7. 22	Barrow A 2	68. 32 ·75	T D
23. 22	Dent A 1	68. 26 ·00	T D
25. 23	Barrow A 2	68. 36 ·25	T D
29. 23	Dent A 3	68. 27 ·50	T D
31. 23	,, A 1	68. 27 ·75	T D
June 4. 22	Barrow A 2	68. 35 ·00	T D
8. 0	Dent A 3	68. 28 ·25	T D
11. 22	,, A 1	68. 29 ·75	T D
13. 22	Barrow A 2	68. 36 ·00	T D
14. 23	Dent A 3	68. 28 ·50	T D
20. 21	,, A 1	68. 29 ·25	T D
25. 21	Barrow A 2	68. 36 ·00	T D
June 26. 21	Dent A 3	68. 26 ·75	T D
29. 1	,, A 1	68. 30 ·75	T D
July 1. 21	Barrow A 2	68. 36 ·00	T D
4. 22	Dent A 3	68. 28 ·50	T D
6. 21	,, A 1	68. 31 ·25	T D
10. 21	Barrow A 2	68. 36 ·00	T D
12. 22	Dent A 3	68. 29 ·50	T D
18. 22	,, A 1	68. 31 ·25	T D
19. 22	Barrow A 2	68. 36 ·50	T D
24. 22	Dent A 3	68. 27 ·75	T D
26. 1	,, A 1	68. 30 ·50	T D
30. 22	Barrow A 2	68. 37 ·75	T D
31. 21	Dent A 3	68. 27 ·25	T D
August 2. 21	Dent A 1	68. 30 ·50	T D
6. 22	Barrow A 2	68. 36 ·00	T D
9. 21	Dent A 3	68. 29 ·00	T D
13. 21	,, A 1	68. 26 ·50	T D
14. 22	Barrow A 2	68. 37 ·25	T D
16. 22	Dent A 3	68. 29 ·75	T D
19. 23	,, A 1	68. 31 ·00	H
28. 21	,, ,,	68. 25 ·50	T D
30. 22	Barrow A 2	68. 38 ·75	T D
September 3. 21	Dent A 3	68. 29 ·00	T D
6. 21	,, A 1	68. 33 ·75	T D
11. 21	Barrow A 2	68. 36 ·00	T D
19. 21	Dent A 3	68. 29 ·25	T D
25. 23	,, A 1	68. 25 ·75	T D
October 2. 23	Barrow A 2	68. 35 ·25	T D
9. 1	Dent A 3	68. 30 ·25	T D
11. 21	,, A 1	68. 25 ·00	T D
16. 22	Barrow A 2	68. 37 ·00	T D
17. 21	Dent A 3	68. 30 ·50	T D
24. 1	,, A 1	68. 24 ·25	T D
26. 0	Barrow A 2	68. 34 ·75	T D
30. 22	Dent A 3	68. 31 ·00	T D
November 3. 22	Dent A 1	68. 24 ·75	T D
5. 22	Barrow A 2	68. 36 ·00	H
14. 22	Dent A 3	68. 30 ·50	H
23. 1	,, A 1	68. 2[illegible] ·00	T D
30. 22	Barrow A 2	68. 25 ·50	J G
December 17. 21	Dent A 3	68. 26 ·00	T D
20. 22	,, A 1	68. 17 ·50	T D

October 26. A damp day.

November 23. A very damp day.

The initials J G, T D, and H are those of Mr. Glaisher, Mr. Downs, and Mr. Howe respectively.

MONTHLY MEANS of MAGNETIC DIPS, at the ROYAL OBSERVATORY, GREENWICH, in the Year 1860.

Month, 1860.	Barrow, A.	Number of Obser-vations.	Dent, A 1.	Number of Obser-vations.	Barrow, A 2.	Number of Obser-vations.	Dent, A 3.	Number of Obser-vations.
	° ′		° ′		° ′		° ′	
January	68. 30·25	1	68. 24·00	1	68. 32·75	1	68. 26·25	1
February	68. 29·00	1	68. 25·00	2	68. 35·63	2	68. 27·00	1
March	68. 18·75	1	68. 28·81	4	68. 35·58	3	68. 28·88	2
April	....	..	68. 26·33	3	68. 33·50	3	68. 27·75	3
May	....	..	68. 26·42	3	68. 34·50	2	68. 27·50	1
June	....	..	68. 29·92	3	68. 35·67	3	68. 27·83	3
July	....	..	68. 31·00	3	68. 36·56	4	68. 28·25	4
August	....	..	68. 28·38	4	68. 37·33	3	68. 29·38	2
September	....	..	68. 29·75	2	68. 36·00	1	68. 29·13	2
October	....	..	68. 24·63	2	68. 35·67	3	68. 30·58	3
November	....	..	68. 22·38	2	68. 30·75	2	68. 30·50	1
December	....	..	68. 17·50	1	....	..	68. 26·00	1
Mean	....	..	68. 27·16	30	68. 35·19	27	68. 28·48	24

For this Table the monthly means have been formed without reference to the hour at which the observation was made on each day, as in preceding years no certain difference was found between observations taken at 21^h and at 3^h.

ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS
OF
DEFLEXION OF A MAGNET
FOR
ABSOLUTE MEASURE
OF
HORIZONTAL FORCE.

1860.

The Apparatus used for observation of the Deflexion of a Magnet is described, and the method of computing the results is explained, in the *Greenwich Magnetical and Meteorological Observations*, 1847, Introduction, page xlv, and in the preceding Volume for 1846. The Magnet marked $\frac{\text{D}}{\text{XX}}$ (the same which was used from September 1845), has been employed to produce the deflexion of another magnet, marked $\frac{\text{H}}{23}$ (of nearly the same dimensions): and the vibrations then observed are those of $\frac{\text{D}}{\text{XX}}$.

The weight of $\frac{\text{D}}{\text{XX}}$ is 507·302 grains, or 32·873 grammes.

The length of $\frac{\text{D}}{\text{XX}}$ is 0·3025 foot, or 92·198 millimètres.

The diameter of $\frac{\text{D}}{\text{XX}}$ is 0·025 foot, or 7·620 millimètres.

Its moment of inertia, therefore, (using the English grain and foot as the units of weight and measure,) is 3·88826.

The weight of the embracing frame and mirror is 108·242 grains, or 7·014 grammes; and, on examining the distribution of this weight, it was thought probable that its moment of inertia would be nearly the same as if it were uniformly distributed over the mirror, whose horizontal length is 0·0658 foot; its moment of inertia is therefore 0·03905.

The weight of the suspending stalk with a pulley is 39·377 grains, or 2·552 grammes, and its moment of inertia (estimated as probably the same as if it had been condensed on the pulley whose diameter is 0·0233 foot), is 0·00135.

The following is the explanation of the notation used:—

m = the magnetic moment of the deflecting magnet $\frac{\text{D}}{\text{XX}}$.

X = the absolute measure of horizontal magnetic force.

K = the moment of inertia of $\frac{\text{D}}{\text{XX}}$ with its stirrup and pulley as suspended for vibration = 3·92866, using the English foot and grain as the unit of length and weight.

π = the circumference of circle to diameter 1.

T = the time of vibration in seconds of mean solar time.

Then when the natural sine of the observed deflexion (the Deflecting Magnet being in the Lateral Position) is expressed by the formula

$$\frac{a}{(\text{distance})^3} + \frac{b}{(\text{distance})^5}$$

we have for the formulæ of computation

$$\frac{m}{X} = \tfrac{1}{2}\,a$$

$$mX = \frac{\pi^2 K}{T^2}$$

from which m and X are found.

The computation of the values of m and X has, to the year 1857, been made in reference to English measure only, using the foot and the grain as the units of length and weight; but, for comparison with foreign observations of the Absolute Intensity of Magnetism, it is desirable that X should be expressed also in reference to French measure, in terms of the millimètre and milligramme. If an English foot be supposed equal to α times the millimètre, and a grain be equal to β times the milligramme, then it is plain that, for the reduction of $\frac{m}{X}$ and mX to French measure, these must be multiplied by α^3 and $\alpha^2\beta$ respectively. Hence, X^2 must be multiplied by $\frac{\beta}{\alpha}$, and X by $\sqrt{\frac{\beta}{\alpha}}$. Assuming that the mètre is equal to 39·37079 inches, and the gramme equal to 15·432349 grains, $\log.\sqrt{\frac{\beta}{\alpha}}$ will be found to be = 9·6637805, and the factor for reducing the English values of X to French values will be 0·46108, or $\frac{1}{2{\cdot}1689}$. The values of X in French measure thus derived from those in English measure are given in the proper table.

The natural sine of the observed deflexion, when the Deflecting Magnet is in the Axial Position, is treated in the same manner as the former, for expressing it by the formula

$$\frac{a^1}{(\text{distance})^3} + \frac{b^1}{(\text{distance})^5}$$

but no further use is made of these deflexions.

For the determination of the Absolute Measure of Horizontal Force on those days on which vibrations, unaccompanied by Deflexions, were observed, it is assumed that the quantity m (which is peculiar to the magnet) changes at a uniform rate from one observation of deflexion to the next; and the comparison of its interpolated value with the value of mX given by the vibration determines the value of X.

ABSTRACT of the OBSERVATIONS of DEFLEXION of a MAGNET for ABSOLUTE MEASURE of HORIZONTAL FORCE.

Month and Day, 1860.	Position of Deflecting Magnet with regard to Suspended Magnet.	Distances of Centers of Magnets.	Temperature.	Observed Deflexion.	Mean of the Times of Vibration of Deflecting Magnet.	Number of Vibrations.	Temperature.	Observer.
		ft. in.	°	° ′ ″	s		°	
January 15	Lateral	1. 0	43·1	8. 33. 0·57	5·956	100	40·4	N
	Axial............			4. 29. 20·35				
	Lateral	1. 6		2. 29. 52·03				
	Axial............			1. 18. 0·59	5·957	100	45·0	
February 7	Lateral	1. 0	34·3	8. 30. 47·96	5·937	100	35·5	N
	Axial............			4. 31. 23·66				
	Lateral	1. 6		2. 26. 21·84				
	Axial............			1. 13. 49·97	5·951	100	42·5	
March 14	Lateral	1. 0	51·2	8. 26. 43·89	5·934	100	48·0	N
	Axial............			4. 29. 34·91				
	Lateral	1. 6		2. 27. 51·13				
	Axial............			1. 17. 58·05	5·934	100	51·5	
April 4	Lateral	1. 0	52·7	8. 31. 17·89	5·946	100	50·8	N
	Axial............			4. 30. 35·22				
	Lateral	1. 6		2. 29. 29·72				
	Axial............			1. 14. 38·41	5·934	100	55·5	
June 11	Lateral	1. 0	65·1	8. 26. 34·50	5·922	100	62·3	N
	Axial............			4. 28. 17·56				
	Lateral	1. 6		2. 26. 16·20				
	Axial............			1. 16. 47·09	5·924	100	63·5	
July 25	Lateral	1. 0	62·1	8. 28. 41·90	5·937	100	60·8	N
	Axial............			4. 28. 40·38				
	Lateral	1. 6		2. 28. 27·37				
	Axial............			1. 16. 4·14	5·938	100	65·0	
August 21	Lateral	1. 0	67·3	8. 25. 27·56	5·949	100	63·7	N
	Axial............			4. 27. 1·76				
	Lateral	1. 6		2. 27. 56·18				
	Axial............			1. 15. 9·78	5·944	100	65·0	
September 3	Lateral	1. 0	64·3	8. 24. 31·65	5·963	100	64·0	N
	Axial............			4. 26. 53·99				
	Lateral	1. 6		2. 26. 41·19				
	Axial............			1. 15. 14·58	5·961	100	63·0	
October 22	Lateral	1. 0	59·8	8. 30. 37·15	5·938	100	55·8	N
	Axial............			4. 29. 12·19				
	Lateral	1. 6		2. 29. 6·07				
	Axial............			1. 17. 18·80	5·934	100	58·8	
November 19	Lateral	1. 0	42·2	8. 30. 47·09	5·934	100	39·7	N
	Axial............			4. 29. 32·59				
	Lateral	1. 6		2. 29. 35·67				
	Axial............			1. 18. 0·32	5·935	100	42·7	
December 18	Lateral	1. 0	33·5	8. 32. 15·14	5·940	100	32·8	H C
	Axial............			4. 31. 46·84				
	Lateral	1. 6		2. 31. 15·49				
	Axial............			1. 13. 34·01	5·940	100	34·5	

The lengths of 1 foot and 1 foot 6 inches answer to 304·8 and 457·2 millimètres respectively.
The initials H C and N are those of Mr. Henry Criswick and Mr. W. Nash.

COMPUTATION OF THE VALUES OF ABSOLUTE MEASURE OF HORIZONTAL FORCE.

Month and Day, 1860.	In English Measure.										Value of X in French Measure.
	Apparent Value of *a*.	Apparent Value of *b*.	Apparent Value of *a*′.	Apparent Value of *b*′.	Adopted Value of *a*, assuming the Value of *b* (= 0·00293) as applicable to all.	Log. ½ *a* = Log. $\frac{m}{X}$	Adopted Time of Vibration of Deflecting Magnet.	Log *m* X.	Value of X.	Value of *m*.	
January 16	+0·14581	+0·00287	0·07522	0·00305	+0·14831	8·86260	5·957	0·03848	3·872	0·2822	1·785
February 7	+0·14897	−0·00093	0·06737	0·01149	+0·14816	8·86214	5·949	0·03965	3·879	0·2824	1·789
March 19	+0·14370	+0·00317	0·07510	0·00324	+0·14647	8·85707	5·934	0·04185	3·912	0·2815	1·804
April 4	+0·14555	+0·00263	0·06898	0·00965	+0·14784	8·86119	5·940	0·04097	3·889	0·2825	1·793
June 11	+0·14094	+0·00588	0·07361	0·00465	+0·14608	8·85588	5·923	0·04346	3·925	0·2816	1·810
July 26	+0·14431	+0·00313	0·07195	0·00612	+0·14704	8·85880	5·938	0·04133	3·902	0·2819	1·799
August 21	+0·14414	+0·00236	0·07074	0·00686	+0·14620	8·85626	5·947	0·04002	3·907	0·2806	1·802
September 3	+0·14214	+0·00410	0·07092	0·00664	+0·14572	8·85481	5·962	0·03776	3·904	0·2794	1·800
October 22	+0·14501	+0·00298	0·07403	0·00420	+0·14761	8·86051	5·936	0·04155	3·895	0·2825	1·796
November 19	+0·14584	+0·00220	0·07517	0·00316	+0·14776	8·86095	5·935	0·04177	3·894	0·2827	1·796
December 18	+0·14844	+0·00002	0·06681	0·01217	+0·14818	8·86221	5·940	0·04097	3·885	0·2829	1·791
	Mean -	+0·00293									

In determining the mean value of *b* that for February 7 has been inadvertently omitted.

VALUES OF ABSOLUTE MEASURE OF HORIZONTAL FORCE, from OBSERVATIONS of VIBRATION of the DEFLECTING MAGNET unaccompanied by DEFLEXION. D XX

Month and Day, 1860.		Adopted Time of Vibration.	Temperature.	Log. *m* X in English Measure.	Value of *m* interpolated from the Deflexion Observations. In English Measure.	Inferred Value of X in English Measure.	Value of X in French Measure.	Observer.
January	12	5·939	43·5	0·04111	0·2820	3·898	1·797	H
February	1	5·943	33·2	0·04053	0·2823	3·889	1·793	H
	22	5·953	37·3	0·03907	0·2821	3·879	1·788	H
March	12	5·939	40·3	0·04111	0·2816	3·904	1·800	H
	30	5·941	49·0	0·04082	0·2822	3·893	1·795	H
April	16	5·934	58·0	0·04185	0·2824	3·899	1·798	H
May	4	5·941	62·2	0·04082	0·2821	3·894	1·796	H
June	16	5·936	63·5	0·04155	0·2816	3·908	1·802	H
	30	5·928	56·3	0·04272	0·2817	3·917	1·806	H
July	5	5·928	69·5	0·04272	0·2818	3·916	1·805	H
September	21	5·954	62·3	0·03892	0·2806	3·898	1·797	H
	26	5·969	56·5	0·03674	0·2809	3·874	1·786	H
October	2	5·954	58·8	0·03892	0·2812	3·890	1·793	H

The number of vibrations employed in each determination was 100.

The initial H is that of Mr. Howe.

It will be remarked that, as no correction has been applied for temperature, the result is affected with a slight error, unless the temperature in these vibration-observations coincide with the temperature interpolated between the deflexion-observations.

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

METEOROLOGICAL OBSERVATIONS.

1860.

The day in the first column of the following tables is to be understood, generally, as defined in civil reckoning.

The barometer is described in the *Greenwich Magnetical and Meteorological Observations*, 1847, Introduction, page xlviii, and in the corresponding parts of several preceding volumes. The barometer has been read at 21^h, 0^h, 3^h, 9^h (Astronomical), on every day, excepting on Sundays, and on Good Friday and Christmas Day, on which days fewer observations have been taken. Every reading has been reduced to the reading which would have been obtained at the temperature 32° of the mercury and scale, by application of the correction given in table II. (pages 82 to 87) of the Report of the Committee of Physics of the Royal Society. The mean of the reduced readings has then been taken for each civil day, and finally converted into mean daily reading, by application of the correction inferred from Mr. Glaisher's paper in the *Philosophical Transactions*, 1848, part I.

The positions of all the thermometers are described in the Introduction, 1847, page lxix.

The thermometers, used for determining the highest temperature of the air, and the highest state of the wet-bulb thermometer, are mercurial thermometers invented by Messrs. Negretti and Zambra, and described in the *Results of Meteorological Observations*, 1851, Introduction, page xcvi; and those for the lowest are of Rutherford's construction, described in the Introduction, 1847, page lxvii: they are self-registering. The readings given are corrected for index-errors.

The dry-bulb and wet-bulb thermometers are described in the Introduction, 1847, page xlix; their scales have been verified from time to time, in the manner there described.

A mean daily reading of the dry thermometer is inferred from the mean of observations taken at the same hours as the observations of the barometer, corrected by a quantity given in the *Phil. Trans.*, 1848, part I. Another mean daily reading is inferred from the mean of the maximum and minimum thermometers, also corrected by a small quantity given in the same paper. The mean daily value given in the tables is found by combining these two corrected means giving them weights proportional to the number of observations from which they are respectively derived.

The dew-point has been inferred exclusively from simultaneous observations of the dry-bulb and wet-bulb thermometers. In order to find the difference between the dry-bulb reading and the dew-point, the difference between the dry-bulb and the wet-bulb readings has been multiplied by a factor taken from the following table (deduced by Mr. Glaisher from the comparison of all the simultaneous readings of the dry-bulb, wet-bulb, and dew-point thermometers, from the year 1840 to the end of the year 1854).

TABLE OF FACTORS, BY WHICH THE DIFFERENCE OF READINGS OF THE DRY-BULB AND WET-BULB THERMOMETERS IS TO BE MULTIPLIED, IN ORDER TO PRODUCE THE DIFFERENCE BETWEEN THE READINGS OF THE DRY-BULB AND DEW-POINT THERMOMETERS.

Reading of the Dry-bulb Thermometer.	Factor.	Reading of the Dry-bulb Thermometer.	Factor.	Reading of the Dry-bulb Thermometer.	Factor.	Reading of the Dry-bulb Thermometer.	Factor.	Reading of the Dry-bulb Thermometer.	Factor.	Reading of the Dry-bulb Thermometer.	Factor.
20°	8·1	32°	3·3	44°	2·2	56°	2·0	68°	1·8	80°	1·7
21	7·9	33	3·0	45	2·2	57	1·9	69	1·8	81	1·7
22	7·6	34	2·8	46	2·1	58	1·9	70	1·8	82	1·7
23	7·3	35	2·6	47	2·1	59	1·9	71	1·8	83	1·7
24	6·9	36	2·5	48	2·1	60	1·9	72	1·8	84	1·7
25	6·5	37	2·4	49	2·1	61	1·9	73	1·8	85	1·7
26	6·1	38	2·4	50	2·1	62	1·9	74	1·7	86	1·7
27	5·6	39	2·3	51	2·0	63	1·9	75	1·7	87	1·7
28	5·1	40	2·3	52	2·0	64	1·9	76	1·7	88	1·7
29	4·6	41	2·3	53	2·0	65	1·8	77	1·7	89	1·6
30	4·2	42	2·2	54	2·0	66	1·8	78	1·7	90	1·6
31	3·7	43	2·2	55	2·0	67	1·8	79	1·7		

The dew-point being thus found for each individual observation, the mean is taken for each day (as defined from midnight to midnight), and this mean is corrected by application of the elements in the *Phil. Trans.*, 1848, part I.

The thermometers exhibiting the lowest temperature on the grass, and the highest and lowest temperatures of the water of the Thames, are described in the Introduction, 1847, pages lxix and lxxi. They are occasionally verified. They are read at 21^h (9^h A.M.) every day; their readings are placed opposite to the day preceding the civil day on which the scales are actually read. The thermometer for the highest temperature in the sunshine is a mercurial thermometer with blackened bulb, of Negretti and Zambra's construction: it is read at 9^h P.M. every evening.

The thermometer for the minimum temperature on the grass was out of order on January 16, 26; March 13, 19; April 2, 30; May 10; July 10; October 12, 21; December 29.

The thermometer for the maximum temperature in the water of the Thames was out of order from January 22 to 31; February 5 to 13; March 23 to 26; April 4 to 6; on July 21; from July 23 to 28; December 23 to 24. That for the minimum temperature was out of order from January 15 to 31; February 5 to 13; March 23 to 26; April 4 to 6; on April 20, 29, 30; July 21, 23, 24; from December 23 to 29.

The mean daily value of the difference between dew-point temperature and air-temperature is the difference between the two numbers in the sixth and seventh columns. The Greatest and Least are the greatest and least among the differences corresponding to the times of observation in the civil day, or they are found from the absolute maxima and minima, as determined by comparing the observations of the self-registering wet-bulb thermometers with those of the self-registering dry-bulb thermometers.

The difference between the mean temperature for the day and the mean for the same day of the year on an average of forty-three years, is found by comparison with a table of results deduced by Mr. Glaisher from forty-three years' observations, made at the Royal Observatory, ending 1856.

Osler's Anemometer is described in the Introduction, 1847, page lxxi. Little explanation of the results deduced from it appears to be necessary. It may be understood generally that the greatest pressure occurred in gusts of short duration.

Whewell's Anemometer is described in the Introduction, 1847, page lxxii. The amount of movement of air here exhibited is to be understood as from 22^h to 22^h (10^h A.M. to 10^h A.M.), the numbers being placed opposite to the day preceding the civil day on which the instrument is read.

Robinson's Anemometer is described in the Introduction 1859, page cxli. The instrument is read off every day at 22^h (10^h A.M.)

The register of rain is read at 9^h P.M. from Crosley's Rain-gauge, described in page lxxv of the Introduction, 1847. If, however, there appears to be any doubt as to the correctness of the results, reference is made to the Rain-gauge No. 2, described in the same place.

For understanding the divisions of time under the heads of Electricity and Weather, the following remarks are necessary:—The day is divided by columns into two parts (from midnight to noon, and from noon to midnight), and each of these parts is roughly subdivided into two or three parts by colons (:). Thus, when there is a single colon in the first column, it denotes that the remarks before it apply (roughly) to the interval from midnight to 6 A.M., and those following it to the interval from 6 A.M. to noon. When there are two colons in the first column, it is to be understood that the twelve hours are divided into three nearly equal parts of four hours each. And similarly for the second column.

The Electrical Apparatus is described in page lxxvii of the Introduction, 1847. The following is the explanation of the notation employed, it being premised that the quality of the Electricity is always to be supposed positive when no indication of quality is given:—

g cur.	denotes	*galvanic currents*	N	denotes	*negative*	s	denotes	*strong*	v	denotes	*variable*
m	..	*moderate*	P	..	*positive*	sp	..	*sparks*	w	..	*weak*

The duplication of the letter denotes an intensity of the modification described: thus, s s is very strong; v v, very variable.

The Clouds and Weather are described generally by Howard's Nomenclature; the figure denotes the proportion of sky covered by clouds, the whole sky being represented by 10. The notation is as follows:—

a	denotes	*aurora borealis*	hl	denotes	*hail*	shs-r	denotes	*showers of rain*	h-sqs	denotes	*heavy squalls*
ci	..	*cirrus*	so-ha	..	*solar halo*	c-r	..	*continued rain*	fr-h-sqs	..	*frequent heavy squalls*
ci-cu	..	*cirro-cumulus*	l	..	*lightning*	c-h-r	..	*continued heavy rain*	sc	..	*scud*
ci-s	..	*cirro-stratus*	li-cl	..	*light clouds*	m-r	..	*misty rain*	li-sc	..	*light scud*
cu	..	*cumulus*	lu-co	..	*lunar corona*	fr-m-r	..	*frequent misty rain*	sl	..	*sleet*
cu-s	..	*cumulo-stratus*	lu-ha	..	*lunar halo*	sl-r	..	*slight rain*	sn	..	*snow*
d	..	*dew*	m	..	*meteor*	h-shs	..	*heavy showers*	sl-sn	..	*slight snow*
h-d	..	*heavy dew*	ms	..	*meteors*	fr-shs	..	*frequent showers*	s	..	*stratus*
f	..	*fog*	n	..	*nimbus*	fr-h-shs	.	*frequent heavy showers*	t	..	*thunder*
th-f	..	*thick-fog*	r	..	*rain*	li-shs	..	*light showers*	t-s	..	*thunder storm*
fr	..	*frost*	th-r	..	*thin rain*	oc-shs	..	*occasional showers*	v	..	*variable*
gt-glm		*great gloom*	oc-r	..	*occasional rain*	sq	..	*squall*	w	..	*wind*
h-fr	..	*hoar frost*	fr-r	..	*frozen rain*	sqs	..	*squalls*	st-w	..	*strong wind*
h	..	*haze*	h-r	..	*heavy rain*	fr-sqs	..	*frequent squalls*			

The foot-notes show the means and extremes of readings, and their departure in each month from average values, as found from the preceding Nineteen Years' Observations; those relating to Humidity have been calculated from the Second Edition of Glaisher's Hygrometrical Tables.

MONTH and DAY, 1860.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	WIND AS DEDUCED FROM ANEMOMETERS.							Rain in Inches read at 9h P.M.
			Dry.			Dew Point.	Highest in the Sun, as shewn by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning.						OSLER'S.					WHEWELL'S.	ROBINSON'S.	
															General Direction.		Pressure in lbs. on the square foot.			Amount of Horizontal Movement of the Air on each Day.		
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.			
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.		miles.	in.
Jan. 1	First Qr.	29·491	55·0	50·0	52·2	48·1	56·0	48·0	41·5	41·1	4·1	4·6	2·6	+15·7	SW	SW	12·0	1·0	4·0	255	..	0·05
2	..	29·642	52·0	44·4	47·7	42·1	75·0	39·8	45·0	44·5	5·6	9·0	1·7	+11·3	SW	SW	7·0	0·0	2·7	190	..	0·12
3	..	29·006	55·5	43·9	49·8	45·2	58·2	43·0	46·5	46·0	4·6	8·6	2·9	+13·4	S	SW	12·0	0·0	3·6	245	..	0·06
4	..	28·802	49·2	38·9	43·0	37·4	67·0	37·0	48·0	47·0	5·6	9·7	4·2	+ 6·7	SW	SW	8·0	0·0	2·0	180	..	0·02
5	..	28·675	43·0	36·5	39·7	36·3	46·0	30·7	46·0	45·0	3·4	5·3	0·9	+ 3·6	SW	SW	3·0	0·0	1·0	80	..	0·06
6	Greatest Declination N.	29·373	41·5	34·5	37·5	32·9	47·2	32·0	45·0	44·8	4·6	6·4	1·9	+ 1·5	N	N	4·0	0·0	1·0	..	394	0·05
7	..	30·067	41·0	29·5	34·8	30·4	51·6	23·0	44·5	43·8	4·4	7·4	2·7	− 1·0	NW ; W	W	2·5	0·0	0·4	..	138	0·00
8	Full	30·194	46·0	33·0	40·4	37·1	48·0	26·2	42·8	41·0	3·3	6·7	2·7	+ 4·9	SW	SW	2·5	0·0	0·5	..	206	0·00
9	..	30·067	39·0	30·3	34·9	32·2	44·0	23·0	41·5	41·0	2·7	4·8	2·6	− 0·5	SW	S	0·0	0·0	0·0	..	143	0·00
10	Perigee	30·084	37·9	30·7	34·4	33·4	42·0	25·0	41·0	40·0	1·0	2·4	0·6	− 1·3	S	Calm	0·0	0·0	0·0	..	9	0·00
11	..	29·983	43·5	32·3	38·0	35·9	60·0	29·7	40·5	39·2	2·1	7·0	1·1	+ 2·4	Calm	E	0·0	0·0	0·0	..	67	0·00
12	In Equator	29·965	46·0	33·2	39·1	37·6	54·8	31·5	40·0	39·2	1·5	3·4	0·6	+ 3·5	SSE	SE	0·0	0·0	0·0	..	28	0·00
13	..	30·035	40·5	30·5	36·0	35·2	53·0	25·7	39·8	39·8	0·8	2·8	0·7	+ 0·4	SE	SE	0·0	0·0	0·0	..	9	0·08
14	..	29·896	46·0	37·5	42·5	41·8	48·0	32·0	40·0	39·8	0·7	2·9	0·0	+ 6·9	SE	SW	0·0	0·0	0·0	..	59	0·00
15	Last Qr.	29·684	50·5	41·5	45·9	45·2	50·5	40·0	40·0	..	0·7	1·5	0·0	+10·4	SW	SSW ; W	7·0	0·0	2·5	..	408	0·11
16	..	30·099	44·9	34·5	38·8	33·8	69·2	..	41·0	..	5·0	7·0	2·6	+ 3·3	W	Calm	5·0	0·0	0·8	65	180	0·07
17	..	30·009	40·0	33·2	36·0	34·6	48·8	25·0	41·8	..	1·4	3·0	0·3	+ 0·1	SW	SW ; SSE	0·0	0·0	0·0	50	60	0·04
18	..	29·631	39·4	27·9	32·9	30·9	39·4	18·3	41·8	..	2·0	3·8	0·5	− 3·4	SE	ESE	4·5	0·0	0·4	90	160	0·01
19	Greatest Declination S.	29·546	45·0	35·5	40·2	36·1	61·0	31·0	42·0	..	4·1	7·0	2·6	+ 3·7	SE ; W	SW	2·5	0·0	0·1	160	302	0·06
20	..	29·194	47·0	35·5	42·8	42·5	47·0	31·0	41·0	..	0·3	2·1	0·0	+ 6·0	SSW	Var.	6·0	0·0	2·0	150	304	0·35
21	..	28·895	46·3	32·8	39·9	37·1	49·5	29·0	41·2	..	2·8	5·8	1·5	+ 2·8	SW ; S	SW	11·0	0·0	4·5	345	814	0·06
22	..	29·148	45·0	36·5	40·2	31·1	58·8	34·2	..	..	9·1	12·3	6·2	+ 2·9	W	SW	17·0	1·0	6·5	235	361	0·00
23	New	29·190	45·0	33·5	40·0	34·4	69·5	29·0	..	..	5·6	10·6	3·3	+ 2·5	SW	SW	17·0	0·0	2·0	245	505	0·00
24	..	28·583	47·0	35·0	39·7	35·1	68·0	31·0	..	..	4·6	8·4	2·5	+ 1·9	SW	SW	10·0	0·0	3·0	160	303	0·12
25	Apogee	29·189	42·5	34·3	37·9	32·5	50·0	29·7	..	..	5·4	7·9	2·9	− 0·1	NW	W	4·0	0·0	1·0	110	272	0·05
26	..	29·562	46·0	27·8	35·7	33·6	46·0	..	..	..	2·1	5·5	0·4	− 2·6	NW ; SW	SE ; SW	11·0	0·0	1·0	175	343	0·06
27	In Equator	29·235	49·0	37·0	42·7	38·7	67·0	36·0	..	..	4·0	6·5	2·9	+ 4·4	SW	N	6·0	0·0	2·5	140	341	0·10
28	..	29·901	37·8	27·5	32·6	24·8	66·0	22·0	..	..	7·8	10·3	6·7	− 5·5	NW	SW	4·0	0·0	0·5	150	314	0·00
29	..	29·463	45·0	35·5	40·1	37·7	55·5	23·0	..	..	2·4	5·3	0·2	+ 2·2	WSW	SW	1·5	0·0	0·0	80	177	0·10
30	..	28·907	45·7	32·0	39·8	39·2	66·7	27·0	..	..	0·6	5·5	0·0	+ 2·2	SW ; S	SW ; N	8·0	0·0	1·0	150	350	0·23
31	First Qr.	29·440	42·2	33·7	37·0	31·0	70·8	31·7	..	..	6·0	9·4	3·4	− 0·3	N	N	7·0	0·0	1·5	55	187	0·01
Means	..	29·515	45·0	34·8	39·7	36·2	56·0	30·5	21 days. 42·4	11 days 42·3	3·5	6·2	2·0	+ 3·2	...	...	..	..	..	Sum 3340	Sum 6434	Sum 1·81

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29in·573 on the 1st; the first minimum in the month was 29in·385 on the 1st.
The second maximum ,, was 29in·683 on the 2nd; the second minimum ,, was 28in·653 on the 5th.
The absolute maximum ,, was 30in·208 on the 8th; the third minimum ,, was 29in·924 on the 11th.
The fourth maximum ,, was 30in·052 on the 13th; the fourth minimum ,, was 29in·646 on the 15th.
The fifth maximum ,, was 30in·125 on the 16th; the fifth minimum ,, was 29in·139 on the 20th.
The sixth maximum ,, was 29in·304 on the 20th; the sixth minimum ,, was 28in·796 on the 21st.
The seventh maximum ,, was 29in·280 on the 23rd; the absolute minimum ,, was 28in·560 on the 24th.
The eighth maximum ,, was 29in·723 on the 26th; the eighth minimum ,, was 29in·075 on the 27th.
The ninth maximum ,, was 29in·973 on the 28th; the ninth minimum ,, was 28in·782 on the 30th.
The range in the month was 1in·648.
The mean for the month was 29in·515, being 0in·255 *lower* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 55°·5 on the 3rd; the lowest was 27°·5 on the 28th; and the range in the month was 28°.
The mean ,, of all the highest daily readings was 45°·0, being 1°·9 *higher* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 34°·8, being 1°·2 *higher* than the average of the preceding 19 years.
The mean daily range was 10°·2, being 0°·7 *higher* than the average of the preceding 19 years.
The mean for the month was 39°·7, being 1°·5 *higher* than the average of the preceding 19 years.

MONTH and DAY, 1860.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Jan. 1	o	v	10	10, cu.-s, ci.-s : 5, ci.-s, sc, sl.-r
2	o	o	10, r : 3, ci-s,-ci	3, ci : lu.-ha
3	o	o	10, cu.-s, ci.-s, oc.-r	10, cu.-s, ci.-s, oc.-r
4	o	s N, sps	o : 10, ci.-cu, cu.-s, ci.-s	10 : hl, r : 9, ci.-cu, ci.-s
5	o	o	10, cu.-s, ci.-s, oc.-r	10, fr.-r
6	o	o	10, sl.-r	9, cu.-s, ci.-s, sl.-r : [illegible]
7	s	s : s, sps	o	3, ci.-cu, ci : o : 10, lu.-ha
8	s	s	10, ci.-s, h	10, th.-r
9	s	s	10, f	10, cu.-s, ci.-s : ci.-cu, ci.-s
10	s	s : s, sps	10	10 : cu.-s, ci.-s, th.-f
11	s	s	5, ci.-cu, ci.-s :	o : 10
12	s	s	10, cu.-s, ci.-s	7, cu.-s, ci.-s : o, f
13	o	m	10, r : 9, ci.-cu, ci	9, ci.-cu, ci
14	o	o	10, f	10
15	o	o : w	10, fr.-r	10, fr.-r
16	o	o : w	5, ci.-cu, ci.-s	5, ci.-cu, ci.-s : [illegible]
17	w	o	10, r : [illegible]	9 : 10
18	o	o	9, cu, cu.-s, ci.-s, h.-f : 10	10 : 10, r
19	o	o : w	10, r	10, ci.-cu, ci.-s
20	o	s N : s	10, fr.-r	10, fr.-r : [illegible]
21	m. N	o	10, fr.-r, st.-w	10, fr.-r, st.-w : o
22	o	o	o, st.-w	5, st.-w : o
23	o	o	o	10, cu.-s, ci.-s : r
24	o	s N, sps, gcur : o	o	10, h.-shs.-r : o, l
25	o	o	o, l : [illegible]	10, ci.-s : [illegible]
26	s	s	o, f	10 : h.-r
27	o : w	o	9, ci.-cu, ci.-s, cc.-r	9, ci.-cu, ci.-s
28	o	o	5, ci.-s, h : [illegible] h	10, ci.-cu, ci.-s : r
29	s	w	5, ci.-s, ci	10, ci.-cu, cu.-s, ci.-s : [illegible] th.-r
30	w, N	s N, s P, sps, gcur	10, r	10, r : 7, ci.-su, ci.-s : [illegible] ci.-s, fr.-r
31	o	o	10, s, ci.-s	5, ci.-cu, ci.-s : [illegible]-sn

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 49°·7 on the 1st; and the lowest was 21°·0 on the 28th.
The mean ,, was 36°·2, being 0°·8 *higher* than the average of the preceding 19 years.

Elastic Force of Vapour.—The mean for the month was 0$^{\text{in}}$·214, being 0$^{\text{in}}$·009 *greater* than the average of the preceding 19 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 2$^{\text{gr}}$·5, being 0$^{\text{gr}}$·1 *greater* than the average of the preceding 19 years.

Degree of Humidity.—The mean for the month was 88 (that of Saturation being represented by 100), being 1 *less* than the average of the preceding 19 years.

Weight of a Cubic Foot of Air.—The mean for the month was 548 grains, being 6 grains *less* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·9.

WIND.

The proportions were of N. 3, S. 13, W. 12, and E. 3. The greatest pressure in the month was 17$^{\text{lbs}}$·0 on the square foot on the 22nd and 23rd.

RAIN.

Fell on 21 days in the month, amounting to 1$^{\text{in}}$·8, as measured in the simple cylinder gauge partly sunk below the ground; being the same as the average fall of the preceding 45 years.

MONTH and DAY, 1860.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS. Dry.			Dew Point.	Highest in the Sun, as shewn by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning.		Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	WIND AS DEDUCED FROM ANEMOMETERS. OSLER'S. General Direction.		Pressure in lbs. on the square foot.			WHEWELL'S. Amount of Horizontal Movement of the Air on each Day.	ROBINSON'S. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches read at 9h P.M.
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.			
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	miles.	in.
Feb. 1	..	29·647	38·2	25·5	32·0	25·6	40·0	18·7	38·0	37·0	6·4	10·8	2·7	− 5·2	N	N	3·0	0·0	0·3	120	327	0·00
2	..	29·860	37·0	31·0	33·1	27·7	49·8	27·0	37·5	36·0	5·4	7·8	1·6	− 3·9	N	N	8·0	1·0	3·0	155	374	0·00
3	Greatest Declination N.	30·156	40·2	30·5	34·8	29·1	50·0	26·5	37·5	36·0	5·7	8·9	4·3	− 2·5	NNE	N	3·0	0·0	1·0	95	216	0·00
4	..	30·113	44·0	29·2	37·3	35·8	58·0	23·0	37·5	36·0	1·5	3·9	1·0	− 0·4	SW	SW	2·0	0·0	0·5	180	361	0·00
5	..	29·809	49·0	41·7	44·9	38·5	68·3	32·0	..	..	6·4	8·2	4·2	+ 6·5	W	SW	7·0	0·0	3·0	215	435	0·00
6	..	29·785	42·0	34·3	37·3	29·2	58·0	29·0	..	..	8·1	11·2	4·8	− 1·7	NW	NW	12·0	0·0	3·5	180	398	0·34
7	Full; Perigee	29·985	44·0	29·5	36·6	32·8	47·0	23·0	..	..	3·8	6·5	2·9	− 2·6	W	SW	6·0	0·0	1·2	225	542	0·01
8	..	29·509	50·2	41·0	44·5	39·3	83·0	30·0	..	..	5·2	9·0	1·8	+ 5·3	WSW	W	10·0	0·0	3·0	190	313	0·00
9	In Equator	29·632	39·5	30·5	33·9	29·9	65·0	31·0	..	..	4·0	5·0	2·0	− 5·1	NE	N	8·0	0·0	2·0	140	392	0·07
10	..	29·944	35·0	25·0	28·5	20·1	63·0	9·5	..	..	8·4	11·2	5·4	− 10·2	N	NW ; SW	3·0	0·0	0·3	40	30	0·00
11	..	29·694	37·5	23·2	31·0	27·7	52·0	18·0	..	..	3·3	8·3	2·7	− 7·5	S	S ; E	7·0	0·0	0·3	60	107	0·03
12	..	30·146	39·0	23·7	31·0	27·1	59·0	17·5	..	..	3·9	8·0	2·9	− 7·3	Calm	NE	2·5	0·0	0·5	115	347	0·00
13	Last Qr.	30·391	35·0	24·5	27·7	21·7	61·0	20·6	..	..	6·0	7·1	3·6	− 10·5	NE	NE	11·0	0·0	2·0	160	..	0·03
14	..	30·415	37·0	23·5	29·4	22·2	69·0	18·3	32·0	30·8	7·2	11·8	6·9	− 8·6	NE	NE	5·0	0·0	0·8	95	..	0·00
15	Greatest Declination S.	30·292	42·6	26·0	33·5	30·2	65·0	19·5	35·0	33·0	3·3	5·3	1·0	− 4·6	NE	N	2·5	0·0	0·3	125	..	0·01
16	..	29·991	42·7	32·5	35·6	31·9	72·0	30·0	36·0	34·5	3·7	6·8	0·3	− 2·5	N	NE	8·0	0·0	3·0	185	..	0·05
17	..	30·268	42·8	32·5	37·4	32·3	85·0	26·0	35·5	34·0	5·1	8·6	1·9	− 0·8	NE	NE	7·0	0·0	1·5	95	..	0·01
18	..	30·158	44·0	36·2	40·0	34·3	56·0	33·5	36·5	34·5	5·7	9·0	1·5	+ 1·7	NE	N ; NW	4·0	0·0	0·3	125	..	0·00
19	..	29·488	48·0	34·3	39·1	33·0	74·0	30·0	37·5	35·3	6·1	10·1	2·5	+ 0·7	W	W ; NW	17·0	0·0	3·0	220	..	0·03
20	..	29·342	38·0	28·5	33·4	27·2	55·0	22·0	37·5	35·5	6·2	9·8	3·8	− 5·1	NW	NW	7·0	1·0	3·5	200	..	0·00
21	New ; Apogee.	29·612	40·1	33·7	36·1	29·8	55·0	29·0	37·5	35·0	6·3	9·2	3·2	− 2·4	NW	N	4·0	0·0	0·8	75	..	0·00
22	..	29·876	44·2	32·0	35·5	31·9	68·0	27·7	37·5	35·0	3·6	5·0	1·6	− 3·1	NNE	E	1·5	0·0	0·0	25	125	0·01
23	In Equator	30·076	41·5	25·5	31·8	26·9	73·0	19·8	38·0	36·5	4·9	7·9	3·3	− 7·1	E by S	S	0·0	0·0	0·0	35	150	0·00
24	..	30·057	40·5	24·3	31·5	25·9	76·0	18·0	38·5	36·5	5·6	8·2	3·6	− 7·6	S	S	..	..	..	25	120	0·00
25	..	29·926	43·0	25·1	33·8	28·9	83·0	19·5	38·5	36·5	4·9	9·4	3·5	− 5·7	S	SW	..	..	..	140	318	0·00
26	..	29·286	51·7	33·1	44·6	42·6	73·0	27·0	39·0	37·0	2·0	9·2	0·0	+ 4·9	SW	SW ; W	..	..	..	215	479	0·22
27	..	29·229	45·8	33·7	39·7	32·2	79·0	25·5	39·4	37·4	7·5	12·4	5·3	− 0·1	WNW	WNW ; W	21·0	0·0	8·0	..	597	0·22
28	..	29·266	53·5	32·2	42·3	36·8	88·0	29·3	40·5	38·5	5·5	10·7	1·3	+ 2·3	W ; SW	W	28·0	2·0	10·0	..	..	0·07
29	First Qr.	29·890	47·2	30·6	38·2	30·9	84·0	24·7	40·5	38·5	7·3	12·2	5·1	− 1·8	WNW	SW	4·0	0·0	1·0	..	..	0·00
Means	..	29·857	42·5	30·1	35·7	30·4	65·8	24·3	37·5	35·7	5·3	8·7	2·9	− 2·9	...	...	..	..	..	Sum 3435	Sum 5631	Sum 1·10

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was $30^{\text{in}}\cdot210$ on the 3rd; the first minimum in the month was $29^{\text{in}}\cdot707$ on the 6th.
The second maximum ,, was $30^{\text{in}}\cdot082$ on the 7th; the second minimum ,, was $29^{\text{in}}\cdot442$ on the 8th.
The third maximum ,, was $29^{\text{in}}\cdot968$ on the 10th; the third minimum ,, was $29^{\text{in}}\cdot654$ on the 11th.
The absolute maximum ,, was $30^{\text{in}}\cdot434$ on the 14th; the fourth minimum ,, was $29^{\text{in}}\cdot960$ on the 16th.
The fifth maximum ,, was $30^{\text{in}}\cdot279$ on the 17th; the fifth minimum ,, was $29^{\text{in}}\cdot313$ on the 20th.
The sixth maximum ,, was $30^{\text{in}}\cdot095$ on the 23rd; the absolute minimum ,, was $29^{\text{in}}\cdot037$ on the 27th.
The seventh maximum ,, was $29^{\text{in}}\cdot489$ on the 27th; the seventh minimum ,, was $29^{\text{in}}\cdot133$ on the 28th.
The range in the month was $1^{\text{in}}\cdot397$.
The mean for the month was $29^{\text{in}}\cdot857$, being $0^{\text{in}}\cdot074$ *higher* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 53°·5 on the 28th; the lowest was 23°·2 on the 11th; and the range in the month was 30°·3.
The mean ,, of all the highest daily readings was 42°·5, being 2°·2 *lower* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 30°·1, being 3°·3 *lower* than the average of the preceding 19 years.
The mean daily range was 12°·4, being 1°·1 *higher* than the average of the preceding 19 years.
The mean for the month was 35°·7, being 2°·8 *lower* than the average of the preceding 19 years.

MONTH and DAY, 1860.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Feb. 1	o	o : w	10, f	o : 10
2	o	o	10, ci.-s, sn : 10	10 : 10, ci.-cu, ci.-s, sn
3	o	o	10	10 : 5 : o
4	s	s	10	7, ci.-cu, ci.-s : 10, s, ci.-s
5	v	v	9	10, ci.-cu, ci.-s : 3, ci
6	o	o	10, h.-r : 3, ci.-cu, ci, h	9, ci.-cu, cu.-s, ci.-s : 10, oc.-sn : o
7	o	o : m	5, ci.-s	10, r : 10, oc.-r
8	o	o : w	7, cu.-s, ci.-s, sc	7, cu.-s, ci.-s, sc : 10, oc.-r : 8, ci-s
9	s N, s P	s N, s P : w	10, sl, r	10, cu.-s, ci.-s, sn, sl
10	o	s : o	5, ci.-s, ci, h	5, ci.-cu, ci.-s : o
11	v	o	10, sn	10, sn : 10
12	o	o	5, ci.-cu, ci.-s : o, h	o, h
13	o	o : s N, s P	o : 10, ci.-cu, ci.-s	10, sn : o
14	o	o	10, ci.-s	10, cu.-s, ci.-s : o
15	o	o : s N, s P	10 : 5, ci.-s, ci, h	10, r : 7, ci.-s : 10
16	o	s N, s P	10 : 7, ci.-cu, ci.-s	10, sn, hl, r : o
17	o	o : s N, s P	7, s, ci.-s	7, ci.-cu, ci.-s : 10, r
18	o	w	10, sl.-r	10
19	o : w	o	10, ci.-cu, ci.-s, oc.-r	10, cu.-s, ci.-s : oc.-sn.-r
20	o	o	5, ci.-s, ci : 10	10, sn, r : o
21	o	o	10, oc.-r	10 : o, h : 10
22	o	o	10, sh.-r : 10, s, ci.-s	10, cu.-s, ci.-s : 1, s, ci
23	o	o	o, h.-fr : ci.-cu, ci	7, cu, ci.-cu, ci : o
24	s	s	o, h.-fr	5, cu, ci.-cu, ci : o
25	v	v	10, cu.-s, ci.-s	10, cu, ci.-cu, ci : o
26			10, r : 7, cu, ci.-cu, ci	7, cu, ci.-cu, ci : 10, r
27			10, r : 2, ci.-s, sc : 10, sl, r	3, ci.-s, sc : o, st.-w
28			10, fr.-r, st.-w	7, ci.-s, sc : 10, hl, r : o, st.-w
29			o, h : 5, ci, h	7, cu, ci.-cu, ci, h : o

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 44°·3 on the 28th; and the lowest was 17°·7 on the 10th.

The mean „ was 30°·4, being 4°·2 *lower* than the average of the preceding 19 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot170$, being $0^{in}\cdot032$ *less* than the average of the preceding 19 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{gr}\cdot0$, being $0^{gr}\cdot3$ *less* than the average of the preceding 19 years.

Degree of Humidity.—The mean for the month was 80 (that of Saturation being represented by 100), being 6 *less* than the average of the preceding 19 years.

Weight of a Cubic Foot of Air.—The mean for the month was 559 grains, being 5 grains *greater* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·5.

WIND.

The proportions were of N. 11, S. 6, W. 8, and E. 4. The greatest pressure in the month was $28^{lbs}\cdot0$ on the square foot on the 28th.

RAIN.

Fell on 13 days in the month, amounting to $1^{in}\cdot1$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{in}\cdot5$ *less* than the average fall of the preceding 45 years.

ELECTRICITY.—The apparatus was under repair from February 26 to March 13.

MONTH and DAY, 1860.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 19 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Osler's. General Direction. P.M.	Osler's. Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 24 Obs.	Whewell's. Amount of Horizontal Movement of the Air in each Day	Robinson's. Amount of Horizontal Movement of the Air in each Day	Rain in Inches read at 9h P.M.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.			
Mar. 1	Greatest Declination S.	29·916	48·7	30·1	39·5	32·0	87·0	23·0	41·2	39·2	7·5	16·8	3·8	− 0·6	SW	SW	0·0	0·0	0·0	..	..	0·0
2	..	29·860	45·6	34·7	40·0	35·5	74·0	30·0	41·5	40·2	4·5	7·4	2·6	0·0	SSW	W	3·5	0·0	0·3	..	252	0·06
3	..	29·917	52·0	31·8	41·8	38·3	87·0	25·0	41·5	40·2	3·5	9·7	2·4	+ 1·9	SW	SW	6·0	0·0	1·0	190	421	0·11
4	..	29·662	51·0	38·0	41·4	[illegible]	85·1	33·5	41·8	40·0	1·5	5·3	0·0	+ 1·5	W ; SW	NW ; W	8·0	0·0	2·5	140	332	0·00
5	..	30·145	47·7	35·0	40·1	31·2	79·0	29·8	42·0	40·5	8·9	12·8	6·2	+ 0·1	NW	N	5·0	0·0	1·8	75	[illegible]	[illegible]
6	Perigee.	30·295	47·0	29·2	37·9	34·2	65·0	21·0	41·8	40·5	3·7	9·5	2·4	− 2·2	Calm	W	3·0	0·0	0·2	130	336	0·00
7	In Equator: Full.	30·088	43·6	32·0	33·7	27·6	51·0	31·7	42·0	40·8	6·1	8·3	0·5	− 6·4	Var.	NE	8·0	1·0	3·1	165	[illegible]	0·25
8	..	30·081	42·2	31·5	35·0	29·0	76·7	28·0	41·5	40·0	6·0	6·9	5·3	− 5·1	N	NE	10·0	0·0	4·0	150	352	0·08
9	..	30·014	40·6	28·6	33·2	24·9	78·0	27·5	40·5	39·5	8·3	12·4	3·7	− 7·0	NE	NE	2·5	0·0	0·2	20	105	[illegible]
10	..	29·747	40·0	23·5	30·9	24·4	73·0	22·0	40·5	38·8	6·5	13·5	3·0	− 9·4	Calm	WSW	0·0	0·0	0·0	40	145	0·06
11	..	29·434	45·7	28·7	35·6	31·3	83·0	27·2	40·0	39·0	4·3	10·1	2·9	− 4·9	SW	SW	0·0	0·0	0·0	30	98	0·00
12	..	29·370	44·0	32·2	37·6	33·1	60·0	29·0	40·2	39·5	4·5	8·6	1·0	− 3·0	S	SW	0·0	0·0	0·0	40	146	0·13
13	..	29·416	47·5	32·6	39·3	31·2	84·0	..	40·5	39·5	8·1	13·4	2·2	− 1·7	Calm ; NE	NW	3·0	0·0	0·5	100	257	0·16
14	Greatest Declination S. Last Qr.	29·327	47·0	34·5	40·5	34·9	79·0	28·3	41·0	39·0	5·6	10·5	2·4	− 0·8	W	S ; NE	2·5	0·0	0·0	55	172	0·00
15	..	29·723	47·0	30·5	38·1	28·4	72·0	22·0	41·5	39·8	9·7	15·0	7·4	− 3·4	N ; NW	NW ; W	2·0	0·0	0·5	150	347	0·00
16	..	29·888	51·8	32·5	42·3	34·8	90·7	30·2	41·5	40·0	7·5	13·7	6·4	+ 0·6	N	N ; NW	4·5	0·0	1·3	90	249	0·00
17	..	29·936	56·5	39·5	48·3	46·1	78·0	38·0	42·5	40·0	2·2	8·4	1·3	+ 6·5	SW	WSW	5·0	0·0	1·0	[illegible]	412	0·13
18	..	29·885	55·0	42·3	46·2	38·8	97·0	45·0	43·5	41·5	7·4	12·4	4·2	+ 4·4	SW	W	5·0	0·0	1·6	145	351	0·00
19	..	30·012	54·0	36·5	44·9	38·1	85·0	..	45·0	42·5	6·8	12·8	1·4	+ 3·1	W	SW	3·5	0·0	1·0	220	451	[illegible]
20	Apogee	29·750	53·8	40·5	46·5	40·0	79·0	38·0	45·0	42·5	6·5	11·6	2·9	+ 4·6	SW	SW	10·5	3·0	5·0	245	635	0·00
21	In Equator	29·374	51·0	39·9	43·7	39·1	68·8	40·5	47·0	43·5	4·6	11·7	1·1	+ 1·8	SW	W	16·0	0·0	4·0	[illegible]	432	0·00
22	New	29·679	49·0	32·2	39·8	31·7	81·0	26·0	46·0	45·2	8·1	13·9	2·8	− 2·1	W	NW ; W	4·0	0·0	0·5	135	320	0·03
23	..	29·295	47·2	34·5	40·8	37·4	61·3	32·0	..	..	3·4	9·7	3·2	− 1·2	SW	SW	16·0	0·0	3·0	255	518	0·2
24	..	28·904	49·0	33·3	39·8	31·9	69·0	29·0	..	..	7·9	14·1	2·7	− 2·3	W	W	14·0	0·0	3·5	250	585	[illegible]
25	..	29·220	49·5	35·5	42·0	32·0	77·0	31·0	..	..	10·0	16·2	2·0	− 0·1	W ; NW	NW	10·0	0·0	3·0	130	338	[illegible]
26	..	29·529	49·0	35·7	40·3	32·4	86·0	29·5	..	..	7·9	13·5	3·3	− 2·0	NW	N ; Calm	5·0	0·0	0·5	105	247	0·00
27	..	29·556	47·8	34·1	41·6	35·1	69·0	25·0	47·5	45·0	6·5	11·6	5·1	− 0·8	W	NW ; W	5·0	0·0	0·5	170	371	0·00
28	Greatest Declination N.	29·565	59·5	43·5	50·0	41·6	83·0	37·0	47·0	45·0	8·4	13·2	4·0	+ 7·4	W	W	8·0	0·5	2·5	220	459	0·03
29	..	29·385	59·0	47·0	50·6	43·7	81·0	44·6	47·0	45·0	6·9	16·3	2·3	+ 7·8	W	W	8·0	0·0	3·0	125	332	0·0
30	First Qr.	29·529	51·0	41·2	45·4	40·8	71·0	38·0	47·0	45·0	4·6	7·8	1·8	+ 2·3	Calm	SW	4·0	0·0	0·8	165	339	0·0
31	..	28·864	51·0	43·5	47·2	44·2	63·0	38·8	48·0	47·0	3·0	5·3	1·0	+ 3·8	SW	SW	8·0	1·0	3·5	300	620	0·1
Means	..	29·657	49·2	35·0	41·1	35·0	76·6	31·1	43·1	41·4	6·1	11·4	2·9	− 0·2	...	...	..	..	..	4225	10253	1·8

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was $29^{\text{in}}{\cdot}953$ on the 1st ; the first minimum in the month was $29^{\text{in}}{\cdot}822$ on the 2nd.
The second maximum ,, was $29^{\text{in}}{\cdot}971$ on the 3rd ; the second minimum ,, was $29^{\text{in}}{\cdot}620$ on the 4th.
The absolute maximum ,, was $30^{\text{in}}{\cdot}397$ on the 6th ; the third minimum ,, was $29^{\text{in}}{\cdot}955$ on the 7th.
The fourth maximum ,, was $30^{\text{in}}{\cdot}231$ on the 7th ; the fourth minimum ,, was $29^{\text{in}}{\cdot}332$ on the 12th.
The fifth maximum ,, was $29^{\text{in}}{\cdot}498$ on the 13th ; the fifth minimum ,, was $29^{\text{in}}{\cdot}269$ on the 14th.
The sixth maximum ,, was $30^{\text{in}}{\cdot}036$ on the 19th ; the sixth minimum ,, was $29^{\text{in}}{\cdot}285$ on the 21st
The seventh maximum ,, was $29^{\text{in}}{\cdot}766$ on the 22nd ; the seventh minimum ,, was $28^{\text{in}}{\cdot}809$ on the 24th.
The eighth maximum ,, was $29^{\text{in}}{\cdot}608$ on the 26th ; the eighth minimum ,, was $29^{\text{in}}{\cdot}337$ on the 29th.
The ninth maximum ,, was $29^{\text{in}}{\cdot}605$ on the 30th ; the absolute minimum ,, was $28^{\text{in}}{\cdot}625$ on the 31st.
The range in the month was $1^{\text{in}}{\cdot}772$. The mean for the month was 29·657, being $0^{\text{in}}{\cdot}143$ *lower* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 59°·5 on the 28th; the lowest was 23°·5 on the 10th; and the range in the month was 36°·0.
The mean ,, of all the highest daily readings was 49°·2, being 0°·8 *lower* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 35°·0, being 0°·3 *lower* than the average of the preceding 19 years.
The mean daily range was 14°·2, being 0°·5 *lower* than the average of the preceding 19 years.
The mean for the month was 41°·1, being 0°·7 *lower* than the average of the preceding 19 years.

MONTH and DAY, 1860.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Mar. 1			5, cu, ci.-cu, ci	5, cu, ci.-cu, ci
2			10 : 10, fr.-r	7, ci.-cu, ci.-s : [illegible]
3			10, hl, r : 5, ci.-s, ci	10, oc.-r : 5, cu, ci.-cu
4			10, r	10, f : 0, h
5			3, cu, ci-.cu	5, cu, ci.-cu : 0
6			10, f	10, f : 10, m.-r
7			10, sn, r	10, sl
8			10, cu.-s, ci.-s, sl	10, cu.-s, ci.-s, hl, r : 10
9			0 : 7, ci.-s, ci	7, cu, ci.-cu, ci, sn
10			10, s, ci.-s	10, ci.-s, ci : 10, sn
11			5, ci.-s, ci, h	5, cu, ci.-s : 10, oc.-r
12			10, cu.-s, ci.-s	10 : 10, r
13			0 : 10, cu.-s, ci.-s	10, ci.-cu, ci.-s : 0 : 10
14	0	0	5, ci.-cu, ci.-s : 10, cu, ci.-cu, ci	10, cu.-s, ci.-s
15	0	0	0 : 7, ci.-cu, ci, h	5, ci.-cu, ci, h : 0
16	0	0	5, cu, ci.-cu, ci	9, ci.-cu, ci.-s : 10, r
17	0	0	10	10, cu.-s, ci.-s
18	0	0	10, r	10, ci.-cu, ci.-s : 0
19	0	0	0 : 10, ci.-cu, cu.-s, ci.-s	10
20			10, oc.-r	7, ci.-cu, ci.-s : 10
21			10, sh.-r	10, sh.-r : 5, cu.-s, ci.-s : 0
22			0 : 5, cu.-s, ci.-s, sh.-hl	5, cu, ci.-cu, ci, shs.-hl : 0
23			10, oc.-r	10, oc.-r : v
24			5, cu, ci.-cu, ci	5, cu.-s, ci.-s, hl : 0
25	0	0 : s P, s N	7, cu, ci.-cu, ci	7 : 0, h
26	0	m : 0	10, cu, cu.-s	10, ci.-cu, ci.-s, r : 0, h
27	0	0	10 : 3, ci.-cu, ci.-s	10, ci.-cu, ci.-s : 10
28	0	0	5, ci.-cu, ci.-s	10 : 7, ci.-s, sc : 10, r
29	m : 0	0 : m	10, oc.-r	7, ci.-cu, ci.-s, sc, r : 10
30	0	0	6, cu, ci,-cu, ci	10, s, ci.-s : oc.-r
31	m	m	10 : 10, r	10, r : 7 : 10, oc.-r

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 48°·6 on the 17th ; and the lowest was 22°·2 on the 10th.

The mean ,, was 35°·0, being 1°·4 *lower* than the average of the preceding 19 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot204$, being $0^{\text{in}}\cdot013$ *less* than the average of the preceding 19 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{\text{gr}}\cdot4$, being $0^{\text{gr}}\cdot1$ *less* than the average of the preceding 19 years.

Degree of Humidity.—The mean for the month was 79 (that of Saturation being represented by 100), being 3 *less* than the average of the preceding 19 years.

Weight of a Cubic Foot of Air.—The mean for the month was 549 grains, being 2 grains *less* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·5.

WIND.

The proportions were of N. 5, S. 6, W. 18, and E. 2. The greatest pressure in the month was $16^{\text{lbs}}\cdot0$ on the square foot on the 21st and 23rd.

RAIN.

Fell on 18 days in the month, amounting to $1^{\text{in}}\cdot9$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{\text{in}}\cdot4$ *greater* than the average fall of the preceding 45 years.

ELECTRICITY.—March 20 to 24. The insulating lamp was not burning.

MONTH and DAY, 1860.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest.	Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 24 Obs.	Whewell's. Amount of Horizontal Movement of the Air on each Day.	Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches read at 9h P.M.
		in	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	miles	in.
April 1	..	29·052	56·0	41·9	47·0	39·8	95·5	41·0	48·0	46·0	7·2	11·4	2·2	+ 3·4	W	SW	11·0	0·0	3·0	255	455	0·00
2	..	28·998	46·8	35·5	38·8	35·5	55·0	..	48·5	46·5	3·3	8·8	1·5	− 5·3	SW	W	10·0	0·0	2·0	200	413	0·29
3	..	29·426	55·0	35·9	44·1	36·7	97·0	31·0	48·0	46·0	7·4	15·2	1·8	− 0·4	W	SW	5·0	0·0	1·0	100	239	0·00
4	Perigee; In Equator.	29·625	55·7	33·4	43·4	38·6	93·0	26·0	..	..	4·8	17·2	0·9	− 1·4	SW	E	3·0	0·0	0·5	85	247	0·00
5	Full	29·720	56·0	38·5	46·1	38·6	77·0	34·0	..	..	7·5	18·2	2·2	+ 1·0	NE	NE	7·0	0·0	2·0	85	240	0·00
6	..	29·700	61·0	41·3	48·0	44·0	76·0	37·8	..	..	4·0	10·2	3·1	+ 2·6	NE	Calm	0·0	0·0	0·0	..	29	0·01
7	..	29·773	62·0	47·9	52·2	43·3	92·0	35·0	47·0	45·5	8·9	13·7	6·2	+ 6·7	Calm	W	0·0	0·0	0·0	110	241	0·00
8	..	29·543	57·2	41·5	49·0	45·1	88·0	33·7	48·0	45·8	3·9	9·4	2·9	+ 3·5	SW	SW	8·0	0·0	1·5	215	460	0·00
9	..	29·480	50·8	35·5	40·8	31·5	78·0	32·0	48·0	46·5	9·3	16·0	1·7	− 4·6	W	NW	9·0	0·0	3·0	165	390	0·06
10	Greatest Declination S.	29·684	51·0	32·4	39·3	31·1	92·0	26·0	47·5	45·8	8·2	16·6	3·6	− 5·8	W	N	4·0	0·0	0·8	55	185	0·01
11	..	30·041	46·0	28·2	37·1	30·0	61·0	19·8	47·3	45·5	7·1	14·7	4·1	− 7·9	NW	NW	0·0	0·0	0·0	30	115	0·00
12	..	29·974	48·0	35·8	40·5	34·3	62·0	32·2	46·5	45·5	6·2	13·0	3·6	− 4·4	SW	S	0·0	0·0	0·0	20	94	0·00
13	Last Qr.	29·857	50·0	34·2	40·9	39·3	69·0	28·0	46·5	45·5	1·6	5·7	0·6	− 4·3	S	NE	2·0	0·0	0·0	25	147	0·04
14	..	30·053	46·0	30·8	37·6	36·8	62·0	22·0	46·0	45·0	0·8	4·2	0·0	− 7·9	NE	NE	0·0	0·0	0·0	40	140	0·09
15	..	30·128	57·0	35·0	44·5	41·5	88·0	31·2	46·5	44·8	3·0	12·2	1·6	− 1·2	N	NE; SE	0·0	0·0	0·0	40	172	0·01
16	Apogee.	30·138	61·2	40·5	46·3	40·8	102·0	38·8	46·0	44·3	5·5	15·4	2·0	+ 0·3	NE	E	3·5	0·0	0·3	70	222	0·00
17	In Equator	30·059	58·6	35·5	44·9	34·9	104·0	25·7	46·0	45·0	10·0	19·2	2·8	− 1·3	E	NE	5·0	0·0	1·0	145	352	0·00
18	..	29·933	56·2	36·5	45·0	35·5	102·0	30·0	46·5	45·0	9·5	17·2	2·6	− 1·4	NE	NE	11·0	1·0	4·0	230	539	0·00
19	..	29·918	45·1	34·2	37·3	30·6	58·0	31·0	46·0	45·0	6·7	16·5	0·5	− 9·2	NE	NNE	12·0	0·0	3·5	165	..	0·03
20	..	29·704	49·7	34·5	39·6	30·8	69·0	28·8	46·0	..	8·8	13·2	5·5	− 7·1	N	N	5·0	0·0	2·0	115	..	0·02
21	New	29·605	49·8	30·8	38·7	30·5	87·0	23·0	45·5	45·5	8·2	15·1	3·5	− 8·3	NW	N; NW	4·5	0·0	1·0	55	..	0·01
22	..	29·674	50·5	28·5	38·0	33·6	91·8	22·0	47·0	47·0	4·4	12·8	3·0	− 9·5	NW	NW	3·0	0·0	0·0	60	..	0·08
23	..	29·571	49·2	31·3	39·9	36·3	84·0	26·7	47·0	47·0	3·6	11·1	1·4	− 7·7	WSW	Calm	0·0	0·0	0·0	50	..	0·06
24	..	29·619	43·0	33·5	36·6	34·3	45·0	33·0	47·0	47·0	2·3	6·0	1·3	−11·0	NE	N	4·0	0·0	1·5	185	..	0·29
25	Greatest Declination N.	29·812	54·5	38·5	44·4	37·0	102·0	32·8	46·5	46·5	7·4	14·0	5·5	− 3·2	NE	NE	7·0	0·0	3·5	160	..	0·00
26	..	30·026	55·0	39·5	43·6	36·1	85·4	34·2	46·8	46·8	7·5	10·4	6·4	− 4·0	NE	NE	3·5	0·0	1·5	100	..	0·00
27	..	30·120	54·0	36·0	42·3	34·1	96·8	30·5	46·8	46·8	8·2	13·2	4·0	− 5·7	NNE	NNE	2·5	0·0	0·5	70	..	0·00
28	First Qr.	30·160	58·3	31·3	43·4	38·6	104·0	28·0	47·3	47·3	4·8	14·8	2·3	− 5·1	N by E	Calm	0·0	0·0	0·0	5	..	0·00
29	..	30·204	63·0	31·0	47·4	39·9	116·0	24·5	46·5	..	7·5	20·3	3·0	− 1·7	SE	SE	0·0	0·0	0·0	40	..	0·00
30	..	30·273	65·0	38·0	50·4	42·1	116·0	..	47·0	..	8·3	18·6	1·9	+ 0·9	SE	E	1·0	0·0	0·0	50	..	0·00
Means	..	29·796	53·7	35·6	42·9	36·7	85·0	30·0	46·9	45·9	6·2	13·5	2·8	− 3·3	...	...	..	..	..	Sum 2875	Sum 4680	Sum 1·00

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29$^{\text{in}}$·124 on the 1st; the absolute minimum in the month was 28$^{\text{in}}$·955 on the 2nd.
The second maximum ,, was 29$^{\text{in}}$·789 on the 7th; the second minimum ,, was 29$^{\text{in}}$·381 on the 8th.
The third maximum ,, was 30$^{\text{in}}$·062 on the 11th; the third minimum ,, was 29$^{\text{in}}$·822 on the 13th.
The fourth maximum ,, was 30$^{\text{in}}$·175 on the 16th; the fourth minimum ,, was 29$^{\text{in}}$·593 on the 21st.
The fifth maximum ,, was 29$^{\text{in}}$·691 on the 22nd; the fifth minimum ,, was 29$^{\text{in}}$·545 on the 23rd.
The absolute maximum ,, was 30$^{\text{in}}$·289 on the 30th.
The range in the month was 1$^{\text{in}}$·334.
The mean for the month was 29$^{\text{in}}$·796, being 0$^{\text{in}}$·064 *higher* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 65°·0 on the 30th; the lowest was 28°·2 on the 11th.
The range ,, was36°·8.
The mean ,, of all the highest daily readings was 53°·7, being 3°·3 *lower* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 35°·6, being 3°·2 *lower* than the average of the preceding 19 years.
The mean daily range was 18°·1, being 0°·1 *lower* than the average of the preceding 19 years.
The mean for the month was 42°·9, being 3°·6 *lower* than the average of the preceding 19 years.

MONTH and DAY, 1860.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
April 1	o	o	10	5, ci.-cu : 10, f, ci.-s, oc.-r : 2
2	s N, s P, sps, g cur	s N, : P, sps, g cur	10, r	10, hl, r : o
3	o	o : w	5, cu, ci.-cu	5, cu, ci.-cu, ci
4	o	w	10, s, ci.-s, h	9, s, ci.-s : 2, ci.-s, ci
5	o	w	7, ci.-cu, ci	10, ci.-cu, ci.-s
6	o	o : s	10, oc.-r	7, ci.-s, ci
7	o	o : w	10, ci.-s, h	7, cu, ci.-cu, ci : o
8			10, cu.-s, ci.-s	10, cu.-s, ci.-s : oc.-r
9	s :		10, cu.-s, ci.-s	10, ci.-cu, ci.-s, hl, r : 10, hl, t, l . c, a
10			7, cu, ci.-cu, ci	10, ci.-cu, ci.-s, hl, sl : o
11			10, ci.-cu, cu.-s	7, ci.-cu, ci.-s : 2, ci.-s, h
12		m	10	10 : o
13	o	o : w	10, oc.-r	10, cu.-s, ci.-s : o, f
14	o	s	10, oc.-r	10, shs.-r : o : 10
15	o	o	10, ci.-s, ci	10, cu, ci.-cu, ci : 10, oc.-r : 9
16	o	o	10, oc.-r : 8, ci.-cu, ci.-s	o
17			3, cu, ci.-cu, ci	3, cu, ci.-cu, ci : o
18			o	o : 7, cu, ci.-cu, ci
19			10, cu.-s, ci.-s, sl, sn	10, sl : 10, fr.-shs, r
20	o : N, w	o	5, ci.-cu, ci.-s : 10, h.-shs.-hl.-r	10 : 10, oc.-r
21	o	s N, s P, sps, g cur : o	8, ci.-cu, ci.-s	7, ci.-cu, ci.-s, oc.-r
22	o	s N, s P, sps, g cur	10, ci.-cu, ci.-s : 10, sl.-r	10, shs.-hl.-r
23	o	o : s N	8, ci.-cu, ci.-s, h	8, ci.-cu, cu.-s, ci.-s : 10, oc.-r
24	s N, s P, sps, g cur : o	o	10, sn, hl, r	10, r
25	o	o : m	7, cu.-s, ci.-s	10, cu.-s, ci.-s : 10, s, ci.-s
26	w	w : o	10, cu.-s, ci.-s	10, cu.-s, ci.-s
27	o	o	10 : 9, ci.-cu, cu.-s, ci.-s	10, ci.-cu, ci.-s : 10
28	o	v	7, ci.-cu, ci.-s	7, cu, ci.-cu, ci.-s : o
29	v	v : s, sps	o	o : 5, s, lu.-ha
30	o	v	10, ci.-cu, ci : o	o

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 47°·4 on the 16th; and the lowest was 27°·7 on the 11th.

The mean ,, was 36°·7, being 3°·4 *lower* than the average of the preceding 19 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot218$, being $0^{\text{in}}\cdot031$ *less* than the average of the preceding 19 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{\text{gr}}\cdot5$, being $0^{\text{gr}}\cdot4$ *less* than the average of the preceding 19 years.

Degree of Humidity.—The mean for the month was 79 (that of Saturation being represented by 100), being the same as the average of the preceding 19 years.

Weight of a Cubic Foot of Air.—The mean for the month was 540 grains, being 5 grains *greater* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·0.

WIND.

The proportions were of N. 10, S. 5, W. 7, and E. 8. The greatest pressure in the month was $12^{\text{lbs}}\cdot0$ on the square foot on the 19th.

RAIN.

Fell on 13 days in the month, amounting to $1^{\text{in}}\cdot0$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{\text{in}}\cdot8$ *less* than the average fall of the preceding 45 years.

ELECTRICITY.—April 8 to 12 and 17 to 19. The insulating lamp was out.

MONTH and DAY, 1860.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shewn by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Greatest.	Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Least.	Sum of 24 Obs.	Amount of Horizontal Movement of the Air in each Day		Rain in Inches read at 9h P.M.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.			in.
May 1	In Equator	30·125	66·1	38·5	53·1	42·8	110·5	30·2	50·4	47·2	10·3	18·9	1·4	+ 3·1	E	ENE	8·0	0·0	1·5	130	..	0·00
2	Perigee	29·951	68·0	42·7	54·8	39·1	117·0	35·0	49·5	47·5	15·7	26·5	5·5	+ 4·3	ENE	NE	5·0	0·0	2·0	145	352	0·00
3	..	30·037	66·3	40·7	52·4	41·2	112·0	35·0	50·5	48·3	11·2	22·6	1·3	+ 1·5	NE	E	3·5	0·0	1·0	45	188	0·00
4	..	30·034	68·5	38·3	51·3	41·6	114·0	33·0	52·5	50·5	9·7	22·1	1·4	0·0	E	Calm	0·0	0·0	0·0	25	136	0·00
5	Full	30·009	55·0	40·3	45·7	39·3	87·0	31·7	52·5	50·5	6·4	12·0	2·8	— 5·9	Calm	E	2·0	0·0	0·3	75	267	0·00
6	..	29·964	55·5	34·5	43·7	35·6	111·0	26·8	52·5	50·0	8·1	14·8	5·5	— 8·1	ESE	ESE	2·0	0·0	0·0	45	168	0·00
7	Greatest Declination S.	29·621	63·0	32·5	48·6	42·0	108·0	27·0	52·5	50·0	6·6	15·2	1·9	— 3·3	ESE	ESE	2·6	0·0	0·5	105	263	0·00
8	..	29·449	65·3	45·0	52·8	46·6	107·0	39·7	52·5	50·0	6·2	10·8	2·0	+ 1·0	W	SW	4·0	0·0	1·3	140	319	0·03
9	..	29·555	66·0	47·9	53·3	44·2	102·0	44·0	54·6	52·0	9·1	13·1	7·6	+ 1·7	SW	W	3·0	0·0	0·3	90	243	0·00
10	..	29·686	64·7	39·0	52·7	52·5	81·0	..	54·6	52·0	0·2	9·7	1·6	+ 1·3	SW	SW	3·5	0·0	0·5	100	275	0·13
11	..	29·630	63·7	52·8	56·3	53·6	85·4	49·7	55·0	52·5	2·7	8·4	1·2	+ 5·0	SW	SW	3·5	0·0	0·5	90	249	0·09
12	Last Qr.	29·567	66·8	51·8	58·3	52·7	97·0	49·5	56·0	54·0	5·6	9·9	0·2	+ 7·0	SW	SW	0·0	0·0	0·0	95	288	0·45
13	..	29·630	67·0	50·8	55·2	49·7	104·0	48·7	56·5	55·0	5·5	7·8	0·8	+ 3·8	W	W	4·0	0·0	1·5	85	244	0·82
14	Apogee	29·705	65·0	48·5	54·1	51·5	108·0	41·0	56·5	55·0	2·6	8·4	0·0	+ 2·3	WSW	Calm	0·0	0·0	0·0	10	8[illegible]	1·04
15	In Equator	29·720	68·3	48·2	56·6	51·6	112·0	41·5	57·0	54·0	5·0	14·9	1·0	+ 4·4	SE	SW	2·0	0·0	0·0	80	217	0·02
16	..	29·745	62·2	43·6	51·9	49·0	83·0	40·3	57·0	56·3	2·9	7·2	0·7	— 0·7	SW	SW	3·0	0·0	0·5	140	320	0·02
17	..	29·459	57·2	49·7	53·2	51·4	68·0	45·5	57·8	56·5	1·8	2·7	1·3	+ 0·4	SW	SW	6·0	0·0	0·8	100	244	0·21
18	..	29·269	65·0	45·8	54·2	52·9	88·0	40·3	57·8	56·8	1·3	7·0	0·4	+ 1·1	SW; SE	SW	2·8	0·0	0·3	65	207	0·20
19	..	29·669	69·8	43·8	55·3	46·3	113·0	38·0	57·3	56·3	9·0	19·1	1·1	+ 2·0	SW	W	0·0	0·0	0·0	15	122	0·00
20	New	30·046	72·8	46·5	59·5	50·6	116·7	40·2	58·0	56·0	8·9	18·4	1·1	+ 5·9	W	NE; ESE	0·0	0·0	0·0	15	77	0·00
21	..	30·208	74·3	45·3	60·3	49·3	124·5	38·0	59·8	58·0	11·0	22·0	7·0	+ 6·5	ESE	Calm	0·0	0·0	0·0	35	123	0·00
22	Greatest Declination N.	30·083	74·0	47·1	61·4	47·4	119·5	39·0	60·0	59·0	14·0	23·9	2·5	+ 7·3	SSW	SW	0·0	0·0	0·0	55	156	0·00
23	..	29·786	76·5	45·5	60·6	48·8	130·8	37·7	62·0	61·0	11·8	22·5	4·6	+ 6·3	SW	SW	2·8	0·0	0·3	125	297	0·00
24	..	29·857	73·0	50·1	59·3	47·0	120·0	44·0	62·0	61·0	12·3	21·4	1·0	+ 4·9	W	W	2·5	0·0	0·2	55	192	0·00
25	..	29·703	67·9	47·8	55·9	46·6	105·7	38·0	62·0	61·0	9·3	15·4	2·2	+ 1·3	SW	SW	3·5	0·0	0·5	115	275	0·03
26	..	29·268	67·0	50·3	56·3	50·4	109·0	49·5	62·0	61·0	5·9	11·5	4·0	+ 1·6	SW	SW; NW	8·0	0·0	1·5	200	495	0·18
27	First Qr.	29·639	62·8	42·4	50·4	40·3	107·5	38·0	61·0	60·0	10·1	16·9	4·4	— 4·5	NW	W	6·0	0·0	3·0	245	517	0·00
28	In Equator	29·531	57·0	44·0	49·0	37·5	98·0	45·0	60·3	59·0	11·5	16·0	5·7	— 6·2	SW; NW	NW; W	23·0	0·0	9·0	190	459	0·12
29	Perigee	29·879	61·3	38·8	48·7	37·9	105·0	32·7	58·4	57·0	10·8	16·6	3·4	— 6·7	W	W	5·0	0·0	2·0	120	299	0·00
30	..	29·758	63·5	44·7	53·1	41·6	104·0	35·0	58·3	56·0	11·5	19·0	5·7	— 2·6	W	NW	2·0	0·0	0·3	30	159	0·00
31	..	29·555	55·7	44·5	49·7	49·2	65·0	39·0	58·0	57·0	0·5	2·8	0·0	— 6·4	Calm	Calm	0·0	0·0	0·0	65	194	0·58
Means	..	29·746	65·5	44·6	53·8	46·1	103·7	39·1	56·6	54·9	7·7	14·6	2·6	+ 0·9	...	...	..	..	..	Sum 2830	Sum 7384	Sum 3·9

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was $30^{\text{in}}\cdot094$ on the 4th; the first minimum in the month was $29^{\text{in}}\cdot929$ on the 2nd.
The second maximum ,, was $29^{\text{in}}\cdot712$ on the 10th; the second minimum ,, was $29^{\text{in}}\cdot427$ on the 8th.
The third maximum ,, was $29^{\text{in}}\cdot788$ on the 16th; the third minimum ,, was $29^{\text{in}}\cdot516$ on the 12th.
The absolute maximum ,, was $30^{\text{in}}\cdot216$ on the 21st; the fourth minimum ,, was $29^{\text{in}}\cdot228$ on the 18th.
The fifth maximum ,, was $29^{\text{in}}\cdot892$ on the 24th; the fifth minimum ,, was $29^{\text{in}}\cdot736$ on the 23rd.
The sixth maximum ,, was $29^{\text{in}}\cdot651$ on the 27th; the absolute minimum ,, was $29^{\text{in}}\cdot214$ on the 26th.
The seventh maximum ,, was $29^{\text{in}}\cdot889$ on the 29th; the seventh minimum ,, was $29^{\text{in}}\cdot388$ on the 28th.
The range in the month was $1^{\text{in}}\cdot002$.
The mean for the month was $29^{\text{in}}\cdot746$, being $0^{\text{in}}\cdot016$ *lower* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 76°·5 on the 23rd; the lowest was 32°·5 on the 7th.
The range ,, was 44°·0.
The mean ,, of all the highest daily readings was 65°·5, being 1°·2 *higher* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 44°·6, being 0°·5 *higher* than the average of the preceding 19 years.
The mean daily range was 20°·9, being 0°·7 *higher* than the average of the preceding 19 years.
The mean for the month was 53°·8, being 1°·0 *higher* than the average of the preceding 19 years.

MONTH and DAY, 1860.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
May 1	o : s. N	w	o	o
2	o	o : w	o	o
3	v	v	o, ci, ci.-s : o	o
4	o	s : o	10, ci.-s, h : o, h	o, h
5	o	o : s	10	10 : 7, ci.-s
6	v	v	3 : o	o
7	w	w : s	7, ci.-s, ci	7, ci.-s, ci : 10 : 10, r
8	o	o : w	10	7, ci.-cu, ci.-s : 10
9	o	o : w	10, cu.-s., ci.-s : 10, sl.-r	10 : o, h
10	o	o	10, r	10 : 10, h.-shs.-r
11	o	o : w	10, r	10, fr.-r : 3, ci.-s, ci
12	w	w : s	10, ci.-cu, ci	10, ci.-s, ci : 10, r
13	o	o : w	10, oc.-r	10 : o
14	o : N	N : o	10	10, h.-r : 3, ci.-s, ci
15	o	o : s N, s P, sps, g cur	8, ci.-cu, ci.-s, ci	5, ci.-cu, ci.-s : 10, l, t, h.-r
16	o	w : o	10, th.-r	10, cu.-s, ci.-s, oc.-r
17	o	o	10, th.-r	10, fr.-r
18	o	w : o	10, th.-r	10, cu.-s, ci.-s, r
19	o	w : o	3, ci, h	3, ci.-cu, ci
20	o	o : w	5, cu	5, cu, ci.-cu, ci.-s
21	w	w	o	o
22	m	m	5, ci	9, ci.-cu, ci.-s
23	w	w	10, ci.-s, ci	6, ci.-cu, ci : o
24	s	s	10, cu.-s, ci.-s : 7, cu, ci.-cu, ci	7, cu, ci.-cu, ci : 5, ci
25	v	v	10, cu.-s, ci.-s	10, cu.-s, ci.-s : 10, r
26	s N, s P, sps, g cur	s N, s P, sps, g cur	10, ci.-cu, ci.-s	6, cu.-s, ci.-s, shs.-r
27	o	o : s N : w	7, cu.-s, ci.-s	7, cu.-s, ci.-s, sl.-r : 10
28	o	o	5, ci.-cu, ci.-s	9, cu.-s, ci.-s, shs.-hl.-r : o
29	o	o : w	7, ci.-cu, ci.-s, sc	10, ci.-cu, cu.-s, ci.-s : 3, ci
30	o	w	7, ci.-cu, ci.-s	7, ci.-cu, ci.-s : 8, ci.-s, h
31	o	o	10, r	10, r

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was $57^{\circ}\cdot 1$ on the 26th; and the lowest was $34^{\circ}\cdot 4$ on the 6th.

The mean ,, was $46^{\circ}\cdot 1$, being $0^{\circ}\cdot 7$ *higher* than the average of the preceding 19 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot 312$, being $0^{\text{in}}\cdot 012$ *greater* than the average of the preceding 19 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $3^{\text{gr}}\cdot 5$, being $0^{\text{gr}}\cdot 1$ *greater* than the average of the preceding 19 years.

Degree of Humidity.—The mean for the month was 75 (that of Saturation being represented by 100), being 1 *less* than the average of the preceding 19 years.

Weight of a Cubic Foot of Air.—The mean for the month was 536 grains, being 2 grains *less* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by o and a cloudy sky by 10, was $6\cdot 5$.

WIND.

The proportions were of N. 1, S. 7, W. 16, and E. 7. The greatest pressure in the month was $23^{\text{lbs}}\cdot 0$ on the square foot on the 28th.

RAIN.

Fell on 14 days in the month, amounting to $3^{\text{in}}\cdot 9$, as measured in the simple cylinder gauge partly sunk below the ground; being $1^{\text{in}}\cdot 8$ *greater* than the average fall of the preceding 45 years.

MONTH and DAY, 1860.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 19 Years.	WIND AS DEDUCED FROM ANEMOMETERS.							Rain in Inches Read at 9h P.M.
			Dry.			Dew Point.	Highest in the Sun, as shewn by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometer, read at 9h A.M. next morning.						OSLER'S.					[illegible]		
															General Direction.		Pressure in lbs. on the square foot.			Amount of Horizontal Movement of the Air in each Day.		
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.			
		in	°	°	°	°	°	°	°	°	°	°	°	°			lbs.		lbs.			in.
June 1	..	29·542	66·3	47·5	53·4	49·3	110·0	42·0	58·0	57·0	6·1	11·5	1·2	− 1·0	SW	SW	3·5	0·0	1·0	80	217	0·03
2	..	29·144	63·0	47·7	52·7	52·0	79·0	41·0	58·0	57·0	0·7	4·0	0·0	− 3·9	SE	SE ; SW	23·0	0·0	5·0	300	640	0·82
3	Full	29·322	59·7	50·0	52·7	47·6	86·0	47·0	57·0	56·0	5·1	9·3	3·6	− 4·1	SW	SW	15·0	0·0	3·5	165	353	0·20
4	Greatest Declination S.	29·555	64·0	47·6	53·7	47·5	111·0	44·5	57·0	56·0	6·2	14·1	0·8	− 3·4	SW	SW	8·0	0·0	1·5	140	302	0·40
5	..	29·696	62·3	46·5	52·5	46·2	100·2	42·8	57·5	56·3	6·3	13·6	0·6	− 4·6	WSW	WSW	5·0	0·0	0·5	100	247	0·25
6	..	29·636	62·6	43·5	50·1	45·7	106·0	42·0	57·5	56·3	4·4	15·2	1·1	− 7·1	SW	SW	5·0	0·0	0·7	130	241	0·29
7	..	29·634	58·8	45·3	49·6	44·7	103·0	43·0	57·5	56·3	4·9	12·4	1·8	− 7·7	SW	SSW	5·0	0·0	0·6	165	345	0·39
8	..	29·712	64·3	44·8	53·3	45·2	112·0	35·0	58·0	57·0	8·1	13·3	3·1	− 4·1	WSW	SW	6·0	0·0	1·0	110	251	0·00
9	..	29·522	57·0	48·2	51·2	49·7	72·0	45·0	58·0	57·0	1·5	3·8	0·8	− 6·3	SW	Calm	0·0	0·0	0·0	25	145	0·36
10	..	29·576	64·2	47·7	51·9	46·5	98·0	45·5	58·0	57·0	5·4	14·1	1·0	− 5·8	Calm	SW	1·0	0·0	0·0	25	180	0·08
11	Apogee, Last qr. In Equator.	29·696	66·0	44·3	54·2	47·9	109·8	38·0	58·0	57·0	6·3	13·9	2·0	− 3·8	SW	SW	2·5	0·0	0·2	70	197	0·00
12	..	29·353	60·0	50·7	54·0	52·7	74·0	46·0	57·5	56·5	1·3	5·1	0·5	− 4·3	SSE	SW	5·0	0·0	0·6	190	393	0·25
13	..	29·474	64·0	47·5	53·9	45·9	103·7	46·5	58·0	57·0	8·0	13·3	1·0	− 4·6	SW	SW	8·0	0·0	2·5	180	370	0·0
14	..	29·590	65·0	44·1	53·2	46·2	117·0	42·0	58·0	57·0	7·0	15·1	2·9	− 5·6	SW	SW	4·0	0·0	0·8	165	240	0·0
15	..	29·541	67·0	43·6	53·0	47·0	111·0	30·3	58·5	57·5	6·0	18·2	1·1	− 6·0	Calm	SW	1·0	0·0	0·0	20	109	0·2
16	..	29·502	67·0	48·4	57·0	50·9	93·0	44·6	59·0	58·0	6·1	13·3	1·1	− 2·3	Calm	ENE	2·0	0·0	0·0	75	224	0·
17	..	29·412	56·5	49·7	50·8	50·8	80·5	46·0	59·0	58·0	0·0	1·2	0·0	− 8·6	NE	NW	3·5	0·0	0·8	110	287	1·1
18	Greatest Declination N.	29·669	69·5	48·4	56·6	48·5	115·0	45·0	59·5	58·5	8·1	20·3	1·6	− 2·9	WNW	W ; Calm	1·5	0·0	0·0	55	135	0·0
19	New	29·617	63·8	46·6	53·7	52·1	84·0	40·3	59·5	58·3	1·6	9·9	0·8	− 5·9	Calm	SE	1·5	0·0	0·0	65	237	0·1
20	..	29·510	67·5	52·7	58·6	54·1	99·0	49·6	59·0	58·3	4·5	8·8	2·1	− 1·2	SE ; SW	SW	2·5	0·0	0·1	110	111	0·2
21	..	29·669	69·2	49·5	57·6	54·5	110·8	43·7	60·0	59·0	3·1	8·5	1·0	− 2·3	SW	SW	3·5	0·0	0·3	120	260	0·02
22	..	29·856	71·0	50·9	58·1	50·2	119·0	47·0	60·0	59·0	7·9	14·4	3·2	− 1·9	SW	SW ; ESE	2·5	0·0	0·2	150	326	0·0
23	Perigee	29·795	70·8	52·5	60·5	55·4	111·0	50·0	60·0	59·0	4·1	13·1	2·7	+ 0·3	SW	SW	6·0	0·0	1·5	120	250	0·00
24	..	29·813	74·0	57·3	62·6	57·6	108·0	55·0	61·5	60·3	5·0	10·3	1·7	+ 2·2	SW	SW	2·0	0·0	0·0	60	211	0·01
25	In Equator	29·622	68·8	53·0	57·4	53·4	102·0	50·8	61·5	60·3	4·0	12·4	0·8	− 3·2	SW	SW	7·0	0·0	0·8	135	292	0·1
26	First Qr.	29·785	69·7	49·5	57·3	50·2	117·0	47·7	62·0	61·0	7·1	14·4	1·2	− 3·5	SW ; NW	SW	5·0	0·0	0·2	135	290	0·3
27	..	29·731	63·2	50·3	56·0	51·0	85·0	46·2	62·0	61·0	5·0	10·0	1·8	− 5·0	SW	SW	9·0	0·0	1·3	200	411	0·0
28	..	29·643	68·9	51·3	57·6	50·0	111·0	48·8	62·5	61·5	7·6	16·7	1·8	− 3·7	W	SW	7·0	0·0	2·0	185	399	0·1
29	..	29·726	65·7	48·8	55·8	49·6	113·0	44·0	62·0	61·0	6·2	12·2	1·3	− 5·7	W	W	5·0	0·0	1·0	50	225	0·0
30	..	30·047	61·2	48·3	53·0	47·6	89·0	42·0	62·0	61·0	5·4	10·6	1·4	− 8·5	W	N	0·0	0·0	0·0	50	135	0·0
Means	..	29·613	65·0	48·5	54·8	49·7	101·0	44·4	59·2	58·2	5·1	11·7	1·5	− 4·2	...	...	..	..	..	3400	8077	5·80

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The absolute minimum in the month was $29^{\text{in}}\cdot027$ on the 2nd.
The first maximum in the month was $29^{\text{in}}\cdot738$ on the 5th ; the second minimum ,, was $29^{\text{in}}\cdot623$ on the 6th.
The second maximum ,, was $29^{\text{in}}\cdot730$ on the 8th ; the third minimum ,, was $29^{\text{in}}\cdot422$ on the 9th.
The third maximum ,, was $29^{\text{in}}\cdot724$ on the 11th ; the fourth minimum ,, was $29^{\text{in}}\cdot298$ on the 12th.
The fourth maximum ,, was $29^{\text{in}}\cdot600$ on the 14th ; the fifth minimum ,, was $29^{\text{in}}\cdot386$ on the 17th.
The fifth maximum ,, was $29^{\text{in}}\cdot696$ on the 18th ; the sixth minimum ,, was $29^{\text{in}}\cdot500$ on the 30th.
The sixth maximum ,, was $29^{\text{in}}\cdot862$ on the 22nd ; the seventh minimum ,, was $29^{\text{in}}\cdot566$ on the 25th.
The seventh maximum ,, was $29^{\text{in}}\cdot841$ on the 26th ; the eighth minimum ,, was $29^{\text{in}}\cdot628$ on the 27th.
The highest reading took place on the 30th at midnight, and was $30^{\text{in}}\cdot125$, the readings still increasing.
The range in the month was $1^{\text{in}}\cdot098$.
The mean for the month was $29^{\text{in}}\cdot613$, being $0^{\text{in}}\cdot190$ *lower* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was $74^{\circ}\cdot0$ on the 24th ; the lowest was $43^{\circ}\cdot5$ on the 6th ; and the range in the month was $30^{\circ}\cdot5$.
The mean ,, of all the highest daily readings was $65^{\circ}\cdot0$, being $6^{\circ}\cdot5$ *lower* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was $48^{\circ}\cdot5$, being $1^{\circ}\cdot8$ *lower* than the average of the preceding 19 years.
The mean daily range was $16^{\circ}\cdot5$, being $4^{\circ}\cdot8$ *lower* than the average of the preceding 19 years.
The mean for the month was $54^{\circ}\cdot8$, being $4^{\circ}\cdot4$ *lower* than the average of the preceding 19 years.

MONTH and DAY, 1860.	ELECTRICITY.		CLOUDS AND WEATHER	
	A.M.	P.M.	A.M.	P.M.
June 1			7, cu, ci.-cu, ci.-s	7, cu, ci.-cu, ci.-s : 10, sl.-r : 3, ci.-s
2			10, h.-r	10, h.-r : 10, r
3			10, ci.-s, sc, r	7, cu.-s, ci.-s, oc.-r : 10
4			10 : 10, cu.-s, ci.-s, r	10, cu.-s, ci.-s, r : 10, hl, r
5			10, cu.-s, ci.-s	6, ci.-cu, ci.-s, oc.-r
6			10, h.-r	10, t, hl, h.-r : 7, ci.-cu, ci.-s, r
7	0	s N : 0	10, th.-r	9, ci.-cu, ci.-s : 0
8	0	s N : 0	5, ci.-cu, ci.-s	5, ci.-cu, ci.-s : 10, oc.-r
9	s N	s N	10, r	10, r : 10
10	0	0	10, h.-r	7, l, t, r : 0, l
11	0	w	10	9, ci.-cu, ci.-s, ci
12	0	0	10, r	10, r : 7
13	0	0 : w	7, cu, ci.-cu	7, cu, ci.-cu, ci : 0
14	s N, s P, sps, g cur	v	0 : 5, cu, ci.-cu, ci	5, cu, cu.-s, ci.-s, shs-r : 0
15	s N, s P, sps, g cur	m : s	10, cu, ci.-cu, ci.-s, shs.-r	5, cu, ci.-cu, ci : 0
16	m	v	10, ci.-s	10, s, ci.-s, oc.-r
17	s N, s P	w	10, h.-r	10, r
18	0	w	10, r : 5, cu, ci.-cu, ci	5, cu, ci.-cu, ci
19	m	m	10, h.-r	10, oc.-r
20	v	v	10, s, ci.-s : h.-shs.-r	10, oc.-r : 5, cu, cu.-s, h.-shs.-r
21	s	s N : w	9, cu, ci.-cu, ci	10, r : 7, cu.-s, ci.-s : 10, t.-r
22	m	m : s N, s P	8, ci.-cu, ci.-s	8, cu, ci.-cu, ci : 10, r
23	0	0 : s	10, oc.-r	10, cu, ci.-cu, ci
24	s	s	10, cu.-s, ci.-s, r	10, cu.-s, ci.-s : 5, ci.-s, ci
25	s N	w	10, h.-r	10, r : 9, cu.-s, ci.-s
26	0	0 : s	10, h.-r : 5, cu, ci.-cu, ci	7, ci.-cu, ci.-s : 3, ci.-s
27	0	0	10	10 : 10, oc.-r
28	0	w N : 0	5, cu.-s, ci.-s	10, h.-r
29	w : s N, s P, sps, g cur	s N, s P, sps, g cur : 0	7, s, ci.-s, fr.-r, t	10, cu.-s, ci.-s, h.-r, t
30	0	w	10, r	10 : 5, ci.-s, ci

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 60°·0 on the 24th; and the lowest was 43°·1 on the 8th.

The mean ,, was 49°·7, being 1°·1 *lower* than the average of the preceding 19 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot357$, being $0^{in}\cdot017$ *less* than the average of the preceding 19 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $4^{gr}\cdot0$, being $0_{gr}\cdot2$ *less* than the average of the preceding 19 years.

Degree of Humidity.—The mean for the month was 82 (that of Saturation being represented by 100), being 9 *greater* than the average of the preceding 19 years.

Weight of a Cubic Foot of Air.—The mean for the month was 532 grains, being 1 grain *greater* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·9.

WIND.

The proportions were of N. 2, S. 13, W. 13, and E. 2. The greatest pressure in the month was $23^{lbs}\cdot0$ on the square foot on the 2nd.

RAIN.

Fell on 23 days in the month, amounting to $5^{in}\cdot8$ as measured in the simple cylinder gauge partly sunk below the ground; being $3^{in}\cdot9$ *greater* than the average fall of the preceding 45 years.

ELECTRICITY.—June 1 to 6. The insulating lamp was not burning.

MONTH and DAY, 1860.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9^{h} P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9^{h} A.M. next morning.	In the Water of the Thames at Greenwich, by Self-Registering Thermometers, read at 9^{h} A.M. next morning. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 19 Years.	WIND AS DEDUCED FROM ANEMOMETERS. OSLER'S. General Direction. A.M.	General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 24 Obs.	WHEWELL'S. Amount of Horizontal Movement of the Air on each Day.	ROBINSON'S. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches read at 9^{h} P.M.
		in	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	miles	in.
July 1	Greatest Declination S.	30·165	70·0	43·5	55·7	51·7	104·0	37·0	62·0	61·0	4·0	12·4	0·7	− 5·8	NW	NW	0·0	0·0	0·0	55	151	0·00
2	..	30·234	71·9	53·7	61·9	54·3	111·0	49·0	62·0	61·0	7·6	14·9	2·2	+ 0·5	N	NW	0·0	0·0	0·0	40	143	0·00
3	Full	30·178	70·8	55·1	61·7	53·5	104·0	50·0	62·5	61·5	8·2	14·9	4·4	+ 0·3	NNW	NNW	0·0	0·0	0·0	45	140	0·00
4	..	30·019	72·5	51·4	61·7	55·8	102·0	45·5	63·0	62·0	5·9	13·3	1·1	+ 0·2	NW	NE	3·0	0·0	0·2	50	141	0·00
5	..	30·079	73·3	41·6	56·3	50·4	123·0	37·0	63·0	62·0	5·9	21·1	1·1	− 5·3	NE	W; NW	0·0	0·0	0·0	60	188	0·00
6	..	30·063	68·8	53·0	57·2	52·0	112·0	50·3	63·0	62·0	5·2	11·2	3·6	− 4·5	NW; N	N	3·0	0·0	0·3	45	159	0·00
7	..	30·145	69·0	44·5	55·1	52·0	115·0	38·8	63·5	62·5	3·1	10·6	2·8	− 6·7	NE	NE	0·0	0·0	0·0	10	114	0·00
8	In Equator; Apogee.	30·075	71·6	44·6	54·8	49·3	112·0	38·8	63·5	62·5	5·5	16·2	1·1	− 6·9	NE	NE; E	2·0	0·0	0·0	30	183	0·00
9	..	29·984	69·0	50·6	56·8	50·8	121·5	47·0	63·0	62·0	6·0	14·8	2·4	− 4·7	NE	Calm	0·0	0·0	0·0	25	148	0·00
10	..	29·897	60·0	49·3	53·9	49·1	72·0	..	63·0	62·0	4·8	8·4	2·5	− 7·6	NE	NE	0·0	0·0	0·0	2	103	0·00
11	Last Qr.	29·866	71·5	51·3	59·5	53·9	123·0	47·5	63·0	62·0	5·6	14·2	1·8	− 2·1	NE	Calm	0·0	0·0	0·0	5	89	0·00
12	..	29·830	73·0	49·5	57·9	54·8	124·0	38·8	63·5	62·5	2·1	10·2	1·6	− 3·8	N	E; SE	0·0	0·0	0·0	15	106	0·00
13	..	29·768	73·3	48·7	58·2	54·1	121·0	41·2	63·0	62·0	4·1	15·7	0·6	− 3·6	Calm	Calm; S	0·0	0·0	0·0	45	155	0·00
14	..	29·668	74·3	52·5	60·4	55·9	118·0	48·0	63·0	62·0	4·5	14·5	2·5	− 1·3	SW	SW	2·5	0·0	0·3	85	223	0·00
15	..	29·745	73·8	55·8	62·7	58·1	105·3	50·5	63·5	62·5	4·6	15·3	0·8	+ 1·0	SW	SW	3·0	0·0	0·3	70	165	0·00
16	Greatest Declination N.	29·771	64·0	55·5	58·4	56·7	72·0	48·4	64·0	63·0	1·7	7·6	0·4	− 3·3	SW	Calm	3·0	0·0	0·0	10	74	0·41
17	..	29·738	75·0	55·5	62·3	55·5	107·0	51·7	64·5	63·5	6·8	16·8	1·8	+ 0·6	Calm	SW	3·5	0·0	0·2	60	183	0·00
18	New	29·700	72·0	50·2	58·1	52·6	121·0	38·0	64·5	63·5	5·5	11·0	1·6	− 3·6	SW	SW	3·5	0·0	0·3	65	191	0·00
19	..	29·552	69·2	52·7	57·4	52·7	107·0	32·0	64·5	63·5	4·7	13·1	1·5	− 4·3	S	SW	4·0	0·0	0·5	105	271	0·26
20	Perigee	29·704	72·0	53·5	58·9	53·1	109·0	46·5	64·0	63·0	5·8	15·3	0·8	− 2·7	W	SW	4·0	0·0	0·2	85	208	0·16
21	..	29·567	67·2	50·5	55·6	51·7	85·0	46·0	..	..	3·9	12·6	1·2	− 5·9	S	SW	3·0	0·0	0·4	85	242	0·03
22	In Equator	29·595	69·0	50·7	58·5	52·2	108·8	46·5	62·0	61·0	6·3	15·5	2·6	− 3·0	S; NW	NW	4·0	0·0	0·6	110	283	0·15
23	..	29·600	62·5	47·8	53·8	53·0	85·0	41·0	..	..	0·8	7·8	0·0	− 7·7	Calm; SW	SW	6·0	0·0	0·5	135	274	0·40
24	..	29·674	64·2	47·5	54·4	49·6	90·8	40·5	..	..	4·8	12·8	0·4	− 7·2	NW	NW	5·0	0·0	0·7	130	307	0·02
25	First Qr.	29·855	62·7	47·7	53·6	45·5	83·0	41·0	..	61·0	8·1	14·8	2·6	− 8·2	N	N	2·0	0·0	0·2	40	123	0·00
26	..	29·806	65·1	42·8	54·8	46·7	114·0	35·0	..	62·0	8·1	17·5	2·0	− 7·3	NE	NW; SW	0·0	0·0	0·0	40	190	0·00
27	..	29·663	69·5	49·9	57·5	51·3	118·0	44·3	..	62·0	6·2	14·0	2·4	− 4·8	WSW	SW	2·5	0·0	0·0	35	152	0·00
28	Greatest Declination S.	29·601	67·0	51·8	56·4	52·7	95·0	50·0	..	62·5	3·7	11·8	0·4	− 6·1	SW	Calm	0·0	0·0	0·0	55	142	0·27
29	..	29·776	71·2	51·7	57·5	52·7	118·8	49·8	62·0	61·0	4·8	13·7	0·0	− 5·0	NW	NE	3·5	0·0	0·0	85	181	1·09
30	..	29·988	68·0	51·7	56·9	48·4	102·0	45·0	62·3	61·3	8·5	16·0	3·6	− 5·6	NE	Calm	0·0	0·0	0·0	55	146	0·01
31	..	29·899	64·6	51·1	57·3	50·8	89·0	46·5	62·5	61·5	6·5	12·0	3·4	− 5·2	SW	W	0·0	0·0	0·0	75	144	0·00
Means	..	29·845	69·2	50·1	57·6	52·3	105·6	44·1	63·1	62·1	5·3	13·5	1·8	− 4·2	...	...	..	..	..	Sum 1752	Sum 5319	Sum 2·80

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The absolute maximum in the month was 30$^{\text{in}}$·253 on the 2nd; the first minimum in the month was 29$^{\text{in}}$·997 on the 5th.
The second maximum ,, was 30$^{\text{in}}$·162 on the 7th; the second minimum ,, was 29$^{\text{in}}$·660 on the 14th.
The third maximum ,, was 29$^{\text{in}}$·802 on the 16th; the third minimum ,, was 29$^{\text{in}}$·526 on the 19th.
The fourth maximum ,, was 29$^{\text{in}}$·730 on the 20th; the fourth minimum ,, was 29$^{\text{in}}$·530 on the 22nd.
The fifth maximum ,, was 29$^{\text{in}}$·696 on the 22nd; the absolute minimum ,, was 29$^{\text{in}}$·504 on the 23rd.
The sixth maximum ,, was 29$^{\text{in}}$·863 on the 25th; the sixth minimum ,, was 29$^{\text{in}}$·582 on the 28th.
The seventh maximum ,, was 30$^{\text{in}}$·003 on the 30th; the seventh minimum ,, was 29$^{\text{in}}$·897 on the 30th.
The range in the month was 0$^{\text{in}}$·749.
The mean for the month was 29$^{\text{in}}$·845, being 0$^{\text{in}}$·043 *higher* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 75°·0 on the 17th; the lowest was 41°·6 on the 5th; and the range in the month was 33°·4.
The mean ,, of all the highest daily readings was 69°·2, being 4°·8 *lower* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 50°·1, being 3°·2 *lower* than the average of the preceding 19 years.
The mean daily range was 19°·1, being 1°·6 *lower* than the average of the preceding 19 years.
The mean for the month was 57°·6, being 4°·3 *lower* than the average of the preceding 19 years.

MONTH and DAY, 1860.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
July 1	s	s	10, ci.-cu, ci, h	10, ci.-cu, ci.-s
2	s	mN : m	0, h : 10, s, ci.-s	10,
3	v	o : m	10, ci.-s,	10, cu.-s, ci.-s, h
4	m	s : o	10, ci.-cu, ci.-s	8, ci.-s, ci : 10 ci.-s, m.-r : 0
5	ss, sps	o	3, ci : 0	0 : 3, cu.-ci : 0
6	o	s	10	10 : 0
7	o	o : s	10, s, ci.-s	10 : 7, ci.-cu, ci.-s
8	s	s	10	7, ci.-cu, ci : 10, s, ci.-s
9	s	s	10 : 3, ci.-cu, ci.-s	3, ci.-cu, ci.-s
10	v	v	10 : oc.-r	10, cu.-s, ci.-s
11	v	v	10	10 : 9, cu, ci.-cu, ci
12	s	o	10, h : 5, cu, ci.-cu, ci	6, ci.-cu, ci.-s
13	o	o	10, : 7, ci.-s, ci	0 : 5, ci, h
14	o	o	10, th.-r	10, cu, ci.-cu, ci : 0
15	o	o	10 : 7, cu.-s, ci.-s	7, cu.-s, ci.-s
16	o	o	10, r	10, r : 10
17	o	s	10, ci.-cu, ci.-s	10, ci.-s
18	v	v	7, oc.-r	7, ci.-cu, ci.-s : 10, oc.-r
19	o	o	10, cu.-s, ci.-s, r	10, r : 5, cu, ci.-cu, ci : ci.-s, r
20	o	sN : o	10, ci.-s, h.-r	10, r
21	o	o	10, r	10, r : 1, ci
22	o	o	10, cu, cu.-s, s, r	7, cu, ci.-cu, s, shs.-r
23	o	o	10, ci.-cu, ci.-s, ci	10, r
24	o	o	10, ci.-cu, ci.-s	10, cu.-s , ci.-s, cc.-r
25	o	o	9, cu-s, ci.-s	9, cu.-s, ci.-s
26	o	o	3, ci.-cu, ci, h	10, cu, ci.-cu, ci
27	o	o : m	10, ci.-cu, ci.-s	10, ci.-cu, ci
28	o	sN : o	10, h	10, h : 7, cu, ci.-cu, h : 10, l, t, r
29	o	w : o	9, cu.-s, ci.-s	9, ci.-s, ci : t.-s : 8, s, ci.-s
30	o	o : w	5, ci.-cu, ci.-s	5, ci.-cu, ci.-s, ci : 8, s, ci.-s
31	o	o	10, ci.-cu, ci.-s, h	10, ci.-cu, ci.-s, h

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 60°·1 on the 15th; and the lowest was 45°·1 on the 25th.
The mean ,, was 52°·3, being 1°·6 *lower* than the average of the preceding 19 years.

Elastic Force of Vapour.—The mean for the month was 0in·393, being 0in·025 *less* than the average of the preceding 19 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 4gr·4, being 0gr·2 *less* than the average of the preceding 19 years.

Degree of Humidity.—The mean for the month was 83 (that of Saturation being represented by 100), being 7 *greater* than the average of the preceding 19 years.

Weight of a Cubic Foot of Air.—The mean for the month was 534 grains, being 7 grains *greater* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 8·3.

WIND.

The proportions were of N. 12, S. 7, W. 8, and E. 4. The greatest pressure in the month was $6^{\mathrm{lbs}}\cdot 0$ on the square foot on the 23rd.

RAIN.

Fell on 10 days in the month, amounting to $2^{\mathrm{in}}\cdot 8$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{\mathrm{in}}\cdot 1$ *greater* than the average fall of the preceding 45 years.

MONTH and DAY, 1860.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames at Greenwich by Self-Registering Thermometers, read at 9h A.M. next morning. Highest.	Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Greatest.	Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	P.M.	Pressure in lbs. on the square foot. Greatest.	Least.	Mean of 24 Obs.	Whewell's. Amount of Horizontal Movement of the Air on each Day.	Robinson's.	Rain in Inches read at 9h P.M.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	miles	in.
Aug. 1	Full	29·884	70·3	54·6	59·8	50·6	111·0	49·8	62·0	61·0	9·2	15·5	3·0	− 2·7	W	W	3·0	0·0	0·0	90	183	0·00
2	..	29·774	67·0	52·5	57·3	52·7	97·0	44·0	62·0	61·0	4·6	11·0	1·8	− 5·0	W	NW	1·0	0·0	0·0	95	180	0·03
3	..	29·532	67·8	52·4	59·1	55·4	99·0	46·0	62·0	61·0	3·7	8·4	0·4	− 3·1	W	SW	0·0	0·0	0·0	110		0·04
4	..	29·408	70·8	53·3	59·9	54·0	111·0	46·5	62·5	61·5	5·9	13·9	1·4	− 2·2	WSW	W	6·0	0·0	0·4	115		0·04
5	In Equator; Apogee.	29·528	69·2	47·4	57·1	47·8	119·0	39·2	62·5	61·5	9·3	19·1	2·1	− 4·9	W	SW; S	3·5	0·0	0·2	110		0·00
6	..	29·277	64·0	52·0	55·4	49·3	102·0	53·1	62·0	61·0	6·1	13·0	3·2	− 6·6	SW	SW; W	6·0	0·0	1·7	165		0·34
7	..	29·699	68·0	45·5	55·7	46·9	115·0	39·0	62·5	61·5	8·8	18·7	2·9	− 6·3	WSW	W; SW	5·0	0·0	0·6	120		0·00
8	..	29·554	65·0	47·8	53·9	53·1	71·0	39·7	62·0	61·0	0·8	3·2	0·0	− 8·1	SW; S	SW	3·0	0·0	0·5	120		0·20
9	Last Qr.	29·536	64·2	52·6	56·4	47·5	102·0	48·8	61·5	60·5	8·9	14·8	4·8	− 5·5	SW	WNW	3·5	0·0	0·3	70		0·00
10	..	29·716	69·0	47·3	57·5	51·1	119·0	38·0	61·5	60·5	6·4	13·9	3·4	− 4·3	W	SW	3·0	0·0	0·3	135		0·01
11	..	29·428	69·6	53·7	58·3	54·4	112·0	50·0	61·5	60·5	3·9	12·1	2·2	− 3·4	SW	W	5·0	0·0	0·3	105		0·48
12	Greatest Declination N.	29·595	65·0	53·1	57·9	53·0	87·5	51·5	61·0	60·0	4·9	10·6	4·2	− 3·7	W; NW	NW; N	4·5	0·0	0·5	45		0·02
13	..	29·605	69·8	52·7	58·3	53·3	110·0	46·3	61·5	60·5	5·0	10·1	2·6	− 3·2	NNW	SW; S	3·0	0·0	0·0	25		0·02
14	..	29·549	68·8	52·6	59·2	55·1	117·0	50·3	61·5	60·5	4·1	10·1	1·3	− 2·3	W	Calm	0·0	0·0	0·0	5		0·15
15	..	29·518	67·8	51·1	59·3	54·6	103·0	45·4	61·5	60·5	4·7	11·2	0·0	− 2·1	SW	SW; SE	3·0	0·0	0·0	85		0·02
16	New	29·232	70·8	56·2	61·1	57·2	105·0	53·0	61·5	60·5	3·9	7·7	1·9	− 0·3	S	SW	5·0	0·0	0·5	120		0·09
17	Perigee	29·394	65·7	50·3	56·2	48·2	105·0	45·7	62·0	61·0	8·0	16·0	3·0	− 5·1	SW	SW	5·0	0·0	1·0	155		0·04
18	In Equator	29·448	60·0	48·8	52·9	51·3	69·0	42·4	61·5	60·5	1·6	4·9	1·4	− 8·2	SW	WSW	5·0	0·0	2·0	240		0·10
19	..	29·702	65·5	54·4	58·7	55·1	91·8	53·0	61·0	60·0	3·6	9·9	0·0	− 2·2	W	WSW	6·0	0·0	2·0	120		0·12
20	..	29·688	68·7	55·9	59·0	53·4	107·0	55·0	61·0	60·0	5·6	9·3	2·7	− 1·8	W	W	3·5	0·0	0·3	85		0·03
21	..	29·791	70·1	53·5	58·9	53·1	115·0	48·8	61·5	60·5	5·8	14·6	2·2	− 1·7	WNW	W	2·0	0·0	0·0	65		0·00
22	..	29·393	63·8	52·0	56·1	54·4	82·0	47·7	61·0	60·0	1·7	4·4	0·8	− 4·3	SW; S	SW; W	6·0	0·0	1·5	190		0·31
23	First Qr.	29·703	66·8	47·4	55·6	49·6	115·0	37·0	60·5	59·5	6·0	13·7	4·2	− 4·7	W	SW	6·0	0·5	3·0	190		0·03
24	..	29·591	60·8	47·8	54·4	54·4	84·0	42·0	60·5	59·5	0·0	2·3	0·0	− 5·9	W	SW	6·0	0·0	2·5	215		0·48
25	Greatest Declination S.	29·581	64·0	58·3	59·8	58·4	77·0	50·2	60·5	59·5	1·4	4·6	0·4	− 0·4	SW	SW	7·0	0·5	2·8	180		0·36
26	..	29·688	70·0	53·1	59·0	50·8	118·5	48·7	60·5	59·5	8·2	18·7	3·4	− 0·9	W	SW	4·0	0·0	1·0	60	191	0·02
27	..	29·713	68·0	50·7	56·8	51·2	110·0	46·0	60·5	59·5	5·6	15·1	1·6	− 2·9	SW	SW	3·0	0·0	0·3	105	262	0·24
28	..	29·664	66·8	50·2	57·2	53·4	111·0	39·7	61·0	60·0	3·8	8·8	0·0	− 2·4	SW	SW; S	4·5	0·0	0·3	140	301	0·30
29	..	29·391	69·1	52·6	59·7	55·5	110·0	46·2	61·0	60·0	4·2	10·3	2·4	+ 0·3	SW	SW	4·5	0·0	1·3	175	403	0·14
30	..	29·225	67·2	53·2	59·2	52·5	113·0	46·0	61·0	60·0	6·7	13·7	2·8	+ 0·1	SW	SW	9·0	0·0	2·5	195	415	0·01
31	Full	29·425	69·0	51·4	57·4	50·9	121·0	44·0	61·0	60·0	6·5	13·3	2·6	− 1·6	SW	SW	3·0	0·0	0·5	80	227	0·00
Means	..	29·556	67·2	51·8	57·7	52·5	103·5	46·2	61·4	60·4	5·1	11·4	2·0	− 3·4	...	...	..	..	..	Sum 3710	Sum	Sum 3·68

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The absolute maximum in the month was 29$^{\text{in}}$·926 on the 1st; the first minimum in the month was 29$^{\text{in}}$·390 on the 4th.
The second maximum ,, was 29$^{\text{in}}$·564 on the 5th; the second minimum ,, was 29$^{\text{in}}$·223 on the 6th.
The third maximum ,, was 29$^{\text{in}}$·765 on the 7th; the third minimum ,, was 29$^{\text{in}}$·483 on the 8th.
The fourth maximum ,, was 29$^{\text{in}}$·737 on the 10th; the fourth minimum ,, was 29$^{\text{in}}$·427 on the 11th.
The fifth maximum ,, was 29$^{\text{in}}$·671 on the 12th; the fifth minimum ,, was 29$^{\text{in}}$·217 on the 16th.
The sixth maximum ,, was 29$^{\text{in}}$·806 on the 21st; the sixth minimum ,, was 29$^{\text{in}}$·312 on the 22nd.
The seventh maximum ,, was 29$^{\text{in}}$·737 on the 23rd; the seventh minimum ,, was 29$^{\text{in}}$·514 on the 24th.
The eighth maximum ,, was 29$^{\text{in}}$·747 on the 27th; the absolute minimum ,, was 29$^{\text{in}}$·180 on the 30th.
The range in the month was 0$^{\text{in}}$·740.
The mean for the month was 29$^{\text{in}}$·556, being 0$^{\text{in}}$·244 *lower* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 70°·8 on the 4th and 16th; the lowest was 45°·5 on the 7th; and the range in the month was 25°·3.
The mean ,, of all the highest daily readings was 67°·2, being 5°·9 *lower* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 51°·8, being 1°·7 *lower* than the average of the preceding 19 years.
The mean daily range was 15°·4, being 4°·2 *lower* than the average of the preceding 19 years,
The mean for the month was 57°·7 being 3°·8 *lower* than the average of the preceding 19 years.

Robinson's Anemometer was away for repair from August 3 to 25.

MONTH and DAY, 1860.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Aug. 1	o	o : w	10, h : 1, ci	10, s, ci.-s : 10, h.-r
2	o	o	10, th.-r : 10, h	10, cu.-s, ci.-s, h
3	o	o	10, s, ci.-s	10, s, ci.-s
4	o	o	10	7, cu, ci.-cu, ci, shs.-r : [illegible]
5	o	o	7, ci.-cu, ci.-s	7, ci.-cu, ci.-s : 10, oc.-r
6	o	o	10, r	7, ci.-cu, ci.-s, oc.-r : 10, s, ci.-s, n, r
7	o	w : o	3, ci.-cu, ci.-s, sc	3, ci.-cu, ci.-s, sc : 10, ci.-cu, ci.-s
8	o	o	10, h.-r	10, r : 7, s, ci.-s
9	m	m	10, ci.-cu, ci.-s : 8, ci.-cu, ci.-s	8, ci.-cu, ci : 10, cu.-s, ci.-s
10	o	o	10, ci.-cu, ci.-s	3, cu, ci.-cu, ci : 10, cu.-s, ci.-s
11	s N, s P, sps, g cur	o	10, h.-r : 7, ci.-s, sc : 10, t, h.-r	8, s, ci.-s, t, h.-r
12	o	o	10	10 : shs.-r
13	o	o : s	10 : 9, ci.-cu, ci.-s	9 : 10, r
14	m	o	10, s, ci.-s	10, ci.-cu, ci.-s, r : 10, s, ci.-s
15	o	o	10, ci.-cu, ci	10, cu.-s, ci.-s : 10, r
16	o	o	10, r : 9, ci.-cu, ci.-s : 10	10, oc.-r : 10, h.-r
17	s N, sps, g cur	o	5, ci.-cu, ci.-s, ci	7, ci.-cu, ci.-s, shs.-r : o
18	o	o	10, r	10, fr.-r
19	o : w	w : o	10, cu.-s ci.-s	10, ci.-s, fr.-r
20	o	o : w	10 : 8, ci.-cu, ci.-s	8, ci.-cu, ci.-s : 10, sh.-r
21	o	w	10, s, ci.-s, h	10, ci.-cu, ci.-s : 5
22	o	o	10, r	10, r : s, ci,-s
23	o	o	o : 3, cu, ci.-cu, ci, sh.-r	10, cu, cu.-s, shs.-r
24	o	o	5, ci.-cu, ci.-s : 10, r	10, r
25	o	o	10, h.-r	10, r
26	o	o	5, ci.-cu, ci	7, cu, cu.-s, ci.-s : 10
27	o	o : s	10, r : 10	7, cu, ci.-cu, ci : 2, cu.-s
28	s N, s P, sps, g cur	o	9, ci.-cu, ci.-s	10, fr.-shs.-r
29	o	o : s	7, ci.-s, sc	7, cu, ci.-cu, ci, oc.-r : 5 ci.-s, ci
30	o	o	3, cu, cu.-s, sc	3, cu, ci.-cu : 10, sh.-r : 5, ci.-s, sc
31	o	o : s	8, ci.-s, ci, h	8, cu, ci.-cu, ci : 3, ci.-s, ci

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 61°·2 on the 25th; and the lowest was 46°·8 on the 7th.

The mean .. was 52°·5, being 1°·6 *lower* than the average of the preceding 19 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot396$, being $0^{\text{in}}\cdot027$ *less* than the average of the preceding 19 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $4^{\text{gr}}\cdot4$, being $0^{\text{gr}}\cdot3$ *less* than the average of the preceding 19 years.

Degree of Humidity.—The mean for the month was 83 (that of Saturation being represented by 100), being 6 *greater* than the average of the preceding 19 years.

Weight of a Cubic Foot of Air.—The mean for the month was 528 grains, being the same as the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by o and a cloudy sky by 10, was 8·3.

WIND.

The proportions were: N. 1, S. 9, W. 21, and E. o. The greatest pressure in the month was $7^{\text{lbs}}\cdot0$ on the square foot on the 25th.

RAIN.

Fell on 25 days in the month, amounting to $3^{\text{in}}\cdot7$, as measured in the simple cylinder gauge partly sunk below the ground; being $1^{\text{in}}\cdot3$ *greater* than the average fall of the preceding 45 years.

MONTH and DAY, 1860.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning. Highest.	Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Greatest.	Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	P.M.	Pressure in lbs. on the square foot. Greatest.	Least.	Mean of 24 Obs.	Whewell's. Amount of Horizontal Movement of the Air on each Day.	Robinson's.	Rain in Inches read at 9h P.M.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	miles.	in.
Sept. 1	In Equator; Apogee.	29·652	69·5	46·7	56·9	51·4	122·0	43·0	61·5	60·5	5·5	14·2	1·0	− 1·9	SW	Calm	2·5	0·0	0·0	40	157	0·12
2	..	29·788	68·8	44·1	54·4	49·3	114·0	39·8	61·0	60·0	5·1	11·8	1·3	− 4·9	W	W ; NW	0·0	0·0	0·0	15	109	0·00
3	..	29·953	66·2	47·7	55·2	51·6	112·0	37·0	61·0	60·0	3·6	9·3	1·1	− 3·3	NW	Calm	0·0	0·0	0·0	5	84	0·01
4	..	30·052	66·3	46·0	54·8	51·1	109·0	39·8	61·0	60·0	3·7	10·8	0·8	− 3·6	Calm	Calm	0·0	0·0	0·0	..	144	0·00
5	..	30·085	69·0	45·0	56·9	53·4	115·0	37·0	60·5	59·5	3·5	11·5	1·3	− 1·3	SW	NW	0·0	0·0	0·0	40	164	0·00
6	..	30·233	63·9	53·3	56·8	53·3	81·0	52·0	60·5	59·5	3·5	10·1	1·6	− 1·2	NW ; N	NE	0·0	0·0	0·0	15	130	0·00
7	..	30·140	69·7	45·6	56·3	52·9	118·0	35·0	60·5	59·5	3·4	11·7	0·6	− 1·5	NE	NE	0·0	0·0	0·0	..	83	0·00
8	Last Quarter; Greatest Dec. N	29·908	69·7	47·8	58·0	56·1	105·0	38·8	61·0	60·0	1·9	7·0	1·2	+ 0·3	NE	NNE	0·0	0·0	0·0	40	175	0·00
9	..	29·977	60·5	49·3	52·6	46·7	83·0	51·1	60·5	59·5	5·9	8·0	2·9	− 5·0	NE	Calm	0·0	0·0	0·0	10	118	0·00
10	..	29·942	63·5	38·5	49·9	45·3	116·0	30·6	60·5	59·5	4·6	12·4	1·8	− 7·6	Calm ; NE	Calm	0·0	0·0	0·0	40	176	0·07
11	..	30·134	64·3	37·7	50·1	45·5	115·0	33·9	60·5	59·5	4·6	13·7	1·7	− 7·3	Calm ; NE	NE ; SE	2·5	0·0	0·1	25	110	0·00
12	..	30·171	64·5	35·7	49·8	47·4	111·0	28·0	59·5	58·5	2·4	11·8	0·2	− 7·5	SE	SE	0·0	0·0	0·0	55	151	0·00
13	..	29·800	67·2	39·9	54·0	49·7	115·0	32·0	59·5	58·5	4·3	13·0	0·8	− 3·2	S	SW	2·5	0·0	0·3	130	323	0·00
14	..	29·460	67·2	47·8	56·4	50·4	115·0	39·6	58·5	57·5	6·0	14·2	1·5	− 0·6	SW	SW	5·0	0·5	2·0	170	378	0·00
15	In Equator; New ; Perigee	29·395	63·8	50·5	55·5	52·0	107·0	43·2	58·0	57·0	3·5	9·4	0·6	− 1·2	SW	SW	4·0	0·0	1·0	110	286	0·02
16	..	29·542	62·8	49·7	56·3	52·7	95·8	47·0	58·0	57·0	3·6	9·9	0·8	− 0·2	SW	SW	4·0	0·0	0·6	175	405	0·07
17	..	29·478	63·8	57·7	59·5	57·4	76·0	53·0	58·0	57·0	2·1	5·1	0·4	+ 3·2	SW	SW	4·5	0·0	1·3	105	260	0·18
18	..	29·327	57·9	50·2	51·5	50·2	59·0	50·0	58·0	57·0	1·3	2·0	0·0	− 4·5	SW ; NW	SW	0·0	0·0	0·0	35	175	0·32
19	..	29·352	63·0	42·8	51·8	49·3	89·0	35·0	58·0	57·0	2·5	10·3	0·2	− 4·1	Calm	ENE	0·0	0·0	0·0	25	146	0·03
20	..	29·673	68·0	45·7	55·1	51·4	109·0	36·0	58·5	57·5	3·7	9·5	0·8	− 0·5	SW	SW	1·5	0·0	0·0	90	239	0·00
21	Greatest Dec. S First Quarter.	29·854	65·0	51·3	55·6	49·9	99·0	49·5	58·5	57·5	5·7	9·9	1·6	+ 0·1	NW	W	1·5	0·0	0·0	135	248	0·11
22	..	29·571	63·0	49·4	55·1	55·1	76·0	41·0	58·0	57·0	0·0	2·7	0·0	− 0·3	SW	SW	5·0	0·0	1·3	70	236	0·22
23	..	29·595	57·8	46·7	50·1	46·1	98·0	42·0	58·0	57·0	4·0	9·9	1·3	− 5·2	W	SW	0·0	0·0	0·0	..	74	0·04
24	..	29·554	59·0	41·4	48·9	46·2	96·0	34·3	58·0	57·0	2·7	8·6	0·6	− 6·1	SW	NNE	6·0	0·0	0·3	140	337	0·38
25	..	29·628	56·0	42·5	46·9	44·3	82·0	42·0	57·5	56·5	2·6	8·2	0·0	− 8·0	NNE; WNW; WSW	SW	9·0	0·0	2·5	75	222	0·90
26	..	29·641	59·5	37·5	49·4	49·2	99·0	30·3	57·5	56·5	0·2	9·5	0·0	− 5·3	SSW ; SE	SE	3·5	0·0	0·2	45	181	0·11
27	..	29·571	65·7	45·8	53·6	52·7	106·2	38·0	57·0	56·0	0·9	6·5	0·0	− 0·9	SE	SSW	0·0	0·0	0·0	40	140	0·30
28	In Equator	29·618	56·2	48·5	51·3	50·4	59·0	43·7	56·0	55·0	0·9	2·7	0·0	− 3·0	Calm	N	3·0	0·0	0·3	135	352	0·20
29	Apogee	29·785	55·0	46·8	50·7	49·0	59·0	45·0	56·0	55·0	1·7	3·2	0·0	− 3·1	N	N	4·0	0·0	0·5	80	263	0·02
30	Full	29·982	56·2	43·0	49·2	46·2	68·2	34·3	55·5	54·5	3·0	8·4	0·4	− 4·6	Calm	W	0·0	0·0	0·0	20	134	0·00
Means	..	29·762	63·4	45·8	53·4	50·2	97·0	40·1	58·9	57·9	3·2	9·2	0·8	− 3·1	...	...	..	..	..	Sum 1865	Sum 6000	Sum 3·10

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The absolute maximum in the month was 30in·258 on the 6th; the first minimum in the month was 29in·890 on the 8th.
The second maximum ,, was 30in·250 on the 12th; the second minimum ,, was 29in·386 on the 15th.
The third maximum ,, was 29in·559 on the 16th; the absolute minimum ,, was 29in·305 on the 19th.
The fourth maximum ,, was 29in·879 on the 21st; the fourth minimum ,, was 29in·420 on the 24th.
The fifth maximum ,, was 29in·725 on the 25th; the fifth minimum ,, was 29in·566 on the 27th.
The range in the month was 0in·953.
The mean for the month was 29in·762, being 0in·070 *lower* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 69°·7 on the 8th; the lowest was 35°·7 on the 12th.
The range ,, was 34°·0.
The mean ,, of all the highest daily readings was 63°·4, being 4°·3 *lower* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 45°·8, being 3°·3 *lower* than the average of the preceding 19 years.
The mean daily range was 17°·6, being 1°·0 *lower* than the average of the preceding 19 years.
The mean for the month was 53°·4, being 3°·7 *lower* than the average of the preceding 19 years.

MONTH and DAY, 1860.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Sept. 1	o	o : s N, s P, sps, gcur	3, ci.-cu, ci	3, ci.-cu, ci : 10, r : o
2	o	w	7, ci.-s, ci, h	7, ci.-cu, ci.-s, h
3	s	o : s	o	10, cu, ci.-cu, h.-shs.-r : 10, gt.-glm
4	o	o	7, ci.-cu, ci, h	7, ci.-cu, ci.-s, h : 10, s, ci.-s : o, h
5	w	o	3, ci.-cu, ci.-s, h	10, cu.-s, ci.-s
6	o	w	10, ci.-s	10 : 2, ci
7	o	o : s	8, ci.-cu, ci.-s	5, cu, ci.-cu : o
8	o	o : m	10, f : 8, ci.-cu, ci.-s, h	7, ci.-cu, ci.-s : 10, s, ci-s
9	v	v	10	10
10	s	s : o	2, ci.-cu, ci.-s	9, cu, ci.-cu, ci, r : o
11	s	s	o	7, cu, ci.-cu, ci : o
12	v	v	10, ci.-cu, ci, h	2, cu, ci : o
13	w	s	o	2, cu, ci
14	o	o	10, r : 5, ci.-s, sc	o
15	o	o : s	10, s, ci.-s	10, ci.-cu, ci.-s, oc.-r
16	m	o	10, ci.-s, li.-cl	10, s, ci.-s, th.-r
17	o	o : w	10	10, oc.-r : 10, h.-r
18	o	o	10, r	10, fr.-r
19	v	v	10, h.-r	10 : o, f
20	s	s : o	10	2, cu, ci.-cu : 8, ci.-cu, ci.-s
21	w	o : s	10, ci.-cu, ci.-s, r	10, cu.-s, ci.-s : o
22	o	m	10, th.-r	10, h.-r
23	o	s	10	10
24	s	s : w N	7, ci.-s, ci, h : 10, s, ci.-s	10 : 10, h.-r
25	s N	s N : s	10, h.-r	7, ci.-cu, ci.-s, h : o
26	v, sps, gcur	o . w	10, ci.-cu, ci.-s	10, h.-r : 2, ci.-cu, ci.-s : 10, h.-r
27	o : s N	s N : s	10, h.-r : 8, ci.-cu, ci.-s, fr.-r	10, cu.-s, ci.-s
28	o	m	10, r	10, r : 10
29	o	w	10, th.-r	10, th.-r : 10
30	m	m	7, ci.-cu, ci, h	10, ci.-s

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 59°·9 on the 8th: and the lowest was 42°·9 on the 25th.

The mean ,, was 50°·2, being 0°·9 *lower* than the average of the preceding 19 years.

Elastic Force of Vapour.—The mean for the month was 0^{in}·364, being 0^{in}·019 *less* than the average of the preceding 19 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 4^{gr}·1, being 0^{gr}·1 *less* than the average of the preceding 19 years.

Degree of Humidity.—The mean for the month was 88 (that of Saturation being represented by 100), being 7 *greater* than the average of the preceding 19 years.

Weight of a Cubic Foot of Air.—The mean for the month was 537 grains, being 3 grains *greater* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·4.

WIND.

The proportions were; N. 7, S. 8, W. 10, and E. 5. The greatest pressure in the month was 9^{lbs}·0 on the square foot on the 25th.

RAIN.

Fell on 17 days in the month, amounting to 3^{in}·1, as measured in the simple cylinder gauge partly sunk below the ground: being 0^{in}·7 *greater* than the average fall of the preceding 45 years.

MONTH and DAY, 1860.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun's rays, as shown by a Self-Registering Thermometer, read at 9h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer, read at 9h A.M.	In the Water of the Thames at Greenwich, by Self-Registering Thermometers read at 9h A.M. next morning. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	WIND AS DEDUCED FROM ANEMOMETERS. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 24 Obs.	Whewell's. Amount of Horizontal Movement of the Air on each Day.	Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches read at 9h P.M.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	miles.	in.
Oct. 1	..	30·110	57·0	46·5	50·9	48·6	66·0	45·5	55·5	54·5	2·3	6·4	1·4	− 2·6	NW	NW	0·0	0·0	0·0	15	138	0·00
2	..	30·173	61·0	46·0	53·1	50·2	96·0	36·0	55·5	54·5	2·9	9·5	0·0	− 0·3	W	W	0·0	0·0	0·0	60	240	0·00
3	..	30·005	63·8	46·5	53·7	47·3	109·0	33·3	54·5	53·5	6·4	12·6	3·4	+ 0·6	SW	NW ; W	5·0	0·0	1·5	105	296	0·00
4	..	30·239	58·0	38·6	47·6	42·9	95·0	30·0	54·0	53·0	4·7	14·1	1·8	− 5·4	W	SW	4·0	0·0	0·3	155	364	0·00
5	..	29·940	61·0	44·7	53·0	51·0	88·0	35·0	54·0	53·0	2·0	7·4	1·0	+ 0·2	SW	W	8·0	0·0	2·0	120	314	0·00
6	Greatest Declination N.	30·170	65·3	47·7	55·6	52·2	107·0	47·0	54·0	53·0	3·4	10·5	1·0	+ 3·1	W	SW	0·0	0·0	0·0	65	207	0·00
7	Last Qr.	30·062	60·0	52·3	54·9	50·2	80·0	47·0	54·0	53·0	4·7	5·3	5·0	+ 2·6	SW	W	3·0	0·0	0·0	85	249	0·00
8	..	29·995	57·0	43·5	49·0	42·0	84·0	34·4	54·0	53·0	7·0	14·2	2·9	− 3·1	W	WSW	3·0	0·0	0·3	120	309	0·00
9	..	29·881	52·0	41·5	45·9	37·9	86·0	32·0	53·0	52·0	8·0	15·1	4·0	− 6·0	W	NW	7·0	0·0	1·5	105	294	0·00
10	..	29·755	53·5	36·7	43·6	43·5	53·7	27·0	53·0	52·0	0·1	2·2	0·0	− 8·1	NW : SW	SW	5·0	0·0	1·3	150	354	0·33
11	..	29·415	50·0	36·9	41·6	40·9	53·2	41·5	52·0	51·0	0·7	3·6	0·0	− 9·8	W ; NE	NE ; N	4·0	0·0	0·8	115	312	0·25
12	In Equator	29·747	47·0	32·4	38·6	31·9	68·0	..	52·0	51·0	6·7	14·9	5·5	−12·4	NW	SW	3·0	0·0	0·3	85	240	0·00
13	Perigee	29·396	55·9	39·2	46·8	46·0	85·0	36·8	51·5	50·5	0·8	5·0	0·0	− 3·7	SW	SW	4·0	0·0	1·6	175	383	0·04
14	New	29·531	54·0	42·1	46·6	42·7	72·5	37·0	51·0	50·0	3·9	9·2	0·9	− 3·5	WSW	W	4·0	0·0	0·8	100	269	0·00
15	..	29·521	57·0	39·5	49·7	49·7	60·0	31·0	50·5	49·5	0·0	2·7	0·0	− 0·1	SW	SW	5·0	0·0	1·0	215	465	0·26
16	..	29·468	58·0	46·3	49·5	48·3	62·0	50·0	50·5	49·5	1·2	3·8	0·4	− 0·1	SW	SW	9·0	0·0	2·0	170	373	0·42
17	..	29·832	56·8	45·7	50·0	43·4	94·6	36·0	50·5	49·5	6·6	13·7	3·8	+ 0·6	SW : W	SW	3·0	0·0	2·0	150	345	0·00
18	Greatest Declination S.	29·498	56·2	43·9	50·5	49·3	64·0	36·0	50·5	49·5	1·2	6·4	1·0	+ 1·3	SW	SW ; W	10·0	0·0	2·5	220	450	0·13
19	..	29·524	62·0	49·3	54·6	51·5	97·7	42·0	50·0	49·0	3·1	9·3	2·2	+ 5·5	SW	SW	6·0	0·0	2·0	230	519	0·03
20	..	29·909	57·0	43·5	48·9	42·4	93·8	39·0	50·0	49·0	6·5	12·6	1·8	− 0·2	WSW	W	7·0	0·0	1·8	105	272	0·00
21	First Qr.	30·068	54·0	39·0	46·1	44·7	68·0	..	50·5	49·5	1·4	6·8	0·5	− 2·8	Calm	SW	0·0	0·0	0·0	20	130	0·00
22	..	29·913	60·5	40·5	50·5	48·6	102·0	32·6	50·5	49·5	1·9	11·2	0·0	+ 1·9	S	SW	0·0	0·0	0·0	75	229	0·00
23	..	29·954	61·0	47·7	54·6	54·1	78·5	41·2	51·0	50·0	0·5	6·5	0·0	+ 6·3	SW	SW	1·0	0·0	0·0	50	194	0·03
24	..	29·907	63·0	52·7	56·4	51·4	98·0	48·8	51·0	50·0	5·0	9·7	1·4	+ 8·5	SW	SW	2·0	0·0	0·1	80	230	0·00
25	In Equator	29·907	64·0	52·3	56·5	53·2	98·0	44·5	51·0	50·0	3·3	8·4	1·5	+ 9·0	SW	WSW	1·5	0·0	0·0	30	158	0·00
26	Apogee	29·806	61·0	49·9	54·7	53·6	75·5	50·7	51·5	50·5	1·1	5·5	0·6	+ 7·3	SW	SW	0·0	0·0	0·0	35	159	0·08
27	..	29·819	59·6	47·6	53·4	52·4	69·0	37·0	52·0	51·0	1·0	6·3	0·8	+ 6·2	SW	S	0·0	0·0	0·0	40	154	0·03
28	..	29·920	68·5	50·5	57·0	54·3	110·0	43·0	52·5	51·5	2·7	10·6	0·0	+10·0	S	S	0·0	0·0	0·0	..	59	0·00
29	Full	30·008	63·3	47·3	53·2	52·8	95·0	43·3	52·0	51·0	0·4	7·6	0·0	+ 6·4	S by E	SSE	0·0	0·0	0·0	..	92	0·00
30	..	30·060	66·0	43·7	53·8	51·9	103·0	38·0	52·0	51·0	1·9	10·8	0·0	+ 7·2	SSE	SE	0·0	0·0	0·0	40	140	0·00
31	..	29·990	53·0	44·9	47·5	45·0	63·0	42·0	52·0	51·0	2·5	8·8	1·5	+ 1·0	SE ; NE	NE	0·0	0·0	0·0	35	136	0·00
Means	..	29·856	58·6	44·5	50·6	47·5	83·1	39·4	52·1	51·1	3·0	8·7	1·4	+ 0·6	...	...	..	..	..	Sum 2950	Sum 8074	Sum 1·60

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was $30^{\text{in}}\cdot185$ on the 2nd; the first minimum in the month was $29^{\text{in}}\cdot958$ on the 3rd.
The absolute maximum ,, was $30^{\text{in}}\cdot276$ on the 4th; the second minimum ,, was $29^{\text{in}}\cdot892$ on the 5th.
The third maximum ,, was $30^{\text{in}}\cdot183$ on the 6th; the third minimum ,, was $29^{\text{in}}\cdot812$ on the 9th.
The fourth maximum ,, was $30^{\text{in}}\cdot038$ on the 9th; the fourth minimum ,, was $29^{\text{in}}\cdot336$ on the 11th.
The fifth maximum ,, was $29^{\text{in}}\cdot773$ on the 12th; the absolute minimum ,, was $29^{\text{in}}\cdot330$ on the 13th.
The sixth maximum ,, was $29^{\text{in}}\cdot693$ on the 14th; the sixth minimum ,, was $29^{\text{in}}\cdot365$ on the 16th.
The seventh maximum ,, was $29^{\text{in}}\cdot884$ on the 17th; the seventh minimum ,, was $29^{\text{in}}\cdot436$ on the 18th.
The eighth maximum ,, was $29^{\text{in}}\cdot600$ on the 19th; the eighth minimum ,, was $29^{\text{in}}\cdot432$ on the 19th.
The ninth maximum ,, was $30^{\text{in}}\cdot100$ on the 21st; the ninth minimum ,, was $29^{\text{in}}\cdot791$ on the 26th.
The tenth maximum ,, was 30 ·073 on the 30th.
The range in the month was $0^{\text{in}}\cdot946$.
The mean for the month was $29^{\text{in}}\cdot856$, being $0^{\text{in}}\cdot174$ *higher* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 68°·5 on the 28th; the lowest was 32°·4 on the 12th; and the range in the month was 36°·1.
The mean ,, of all the highest daily readings was 58°·6, being 0°·3 *higher* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 44°·5, being 0°·8 *higher* than the average of the preceding 19 years.
The mean daily range was 14°·1, being 0°·5 *lower* than the average of the preceding 19 years.
The mean for the month was 50°·6, being 0°·9 *higher* than the average of the preceding 19 years.

MONTH and DAY, 1860.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Oct. 1	w	w	10, f	10, h
2	s	s	8, ci.-cu, ci.-s	2, ci.-cu, ci : 8, lu.-ha
3	m	o	5, s, ci.-s, sc	5, ci.-s, sc : 10, ci.-s : 0
4	s	o : s	0, h	7, ci.-cu, ci.-s : 0
5	o	o : m	10, s, ci.-s, sc	10, ci.-s, sc : 2, ci, f
6	w	w	10, cu.-s, ci.-s : 9, ci.-cu, ci	0
7	v	v	10	5 : 10
8	v	v	7, ci.-cu, ci.-s	7, ci.-cu, ci.-s : 0
9	sN	s	10, cu.-s, ci.-s, oc.-r	7, cu, ci.-cu, ci
10			10, ci.-s, oc.-r	10, ci.-s, sc, r
11			10, r	10, h.-r : 0
12			3, ci, h, h.-fr	3, ci.-s : 10
13			10, r : 9, ci.-s, ci : 10	10, r : 10
14			10, oc.-r	10 : 0
15			10, oc.-r	10, r
16			10, r	10, h.-r : 0
17			0	3, ci.-cu, ci : 0
18			10, r	10, ci.-s, oc.-r : 0
19			10, cu.-s, ci.-s	10, ci.-cu, ci.-s : 5
20			0 : 7, ci.-cu, ci	3, ci.-cu, ci : 0
21			10, ci.-s	10, cu.-s, ci.-s
22			3, ci	3, ci : 0
23			10	10, cu.-s, ci.-s : 10
24			10 : 2, ci.-s, ci	10, ci.-s : 10, th.-r
25	o	o	10	10, oc.-r : 3, ci : 10, ci.-s
26	o	o : w	10, cu.-s, ci.-s	8, ci.-s, ci
27	o	o : w	8, ci.-s	8, ci.-cu, ci.-s
28	o	o : s	9, ci.-cu, ci.-s	9, ci.-cu, ci.-s : 0, f
29	s	s	10, th.-f. : 9, ci.-cu, ci.-s	7, ci.-s, ci : 0
30	s	s : sps	7, ci.-cu, ci.-s, f	0 : 10, s, th.-f
31	s	s	10	9, ci.-cu, ci.-s : 3 : 9, f

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 57°·5 on the 29th; and the lowest was 31°·5 on the 12th.

The mean ,, was 47°·5 being 1°·6 *higher* than the average of the preceding 19 years.

Elastic Force of Vapour.—The mean for the month was 0in·329 being 0in·018 *greater* than the average of the preceding 19 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 3gr·7, being 0gr·2 *greater* than the average of the preceding 19 years.

Degree of Humidity.—The mean for the month was 89 (that of Saturation being represented by 100), being 2 greater than the average of the preceding 19 years.

Weight of a Cubic Foot of Air.—The mean for the month was 541 grains, being 2 grains *greater* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·8.

WIND.

The proportions were; N. 3, S. 11, W. 15, and E. 2. The greatest pressure in the month was 10lbs·0 on the square foot on the 18th.

RAIN.

Fell on 10 days in the month, amounting to 1in·6, as measured in the simple cylinder gauge partly sunk below the ground; being 1in·2 less than the average fall of the preceding 45 years.

ELECTRICITY.—October 10 to 24. The insulating lamp was not burning.

MONTH and DAY, 1860.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 43 Years.	WIND AS DEDUCED FROM ANEMOMETERS.							Rain in Inches read at 9h P.M.
			Dry.			Dew Point.	Highest in the Sun, as shewn by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shewn by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning.						OSLER'S.					WHEWELL'S.	ROBINSON'S.	
															General Direction.		Pressure in lbs. on the square foot.			Amount of Horizontal Movement of the Air on each Day.		
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.			
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	miles	in.
Nov. 1	. .	29·916	55·3	39·5	46·9	43·9	98·0	33·0	52·0	51·0	3·0	8·6	0·0	+ 0·5	NE	NE	0·0	0·0	0·0	45	186	0·00
2	Greatest Declination N.	29·953	52·0	35·5	43·3	40·3	96·0	28·8	51·5	50·5	3·0	13·4	0·0	− 2·9	NE	ENE	4·0	0·0	0·2	30	130	0·00
3	. .	29·993	51·0	28·5	39·2	36·3	90·2	21·4	52·0	51·0	2·9	5·9	1·3	− 6·9	ENE	Calm	0·0	0·0	0·0	30	125	0·00
4	. .	29·960	48·2	29·5	40·6	39·1	82·0	23·0	50·5	49·5	1·5	5·5	0·0	− 5·3	Calm	E	3·5	0·0	0·7	45	193	0·00
5	. .	30·019	45·0	34·7	40·6	37·0	63·0	29·0	50·5	49·5	3·6	6·8	0·8	− 5·1	E ; SE	E	4·5	0·0	1·5	100	264	0·00
6	Last Qr.	30·257	46·2	38·4	42·1	37·2	53·0	35·2	49·5	48·5	4·9	6·2	3·0	− 3·4	E	ENE	6·0	0·0	2·2	65	181	0·00
7	. .	30·332	51·7	37·0	42·1	39·0	92·0	31·3	49·5	48·5	3·1	4·8	1·4	− 3·0	NE	NE	0·0	0·0	0·0	45	92	0·00
8	In Equator	30·207	49·0	32·0	39·6	37·8	78·5	21·5	49·5	48·5	1·8	6·7	0·5	− 5·2	NE	Calm	0·0	0·0	0·0	45	82	0·00
9	. .	30·142	42·9	32·2	37·5	35·3	63·0	28·0	48·0	47·0	2·2	7·1	0·2	− 7·0	Calm	E	3·5	0·0	0·5	40	133	0·01
10	. .	29·879	41·7	33·5	38·0	37·6	47·0	25·3	47·5	46·5	0·4	2·1	0·0	− 6·3	E	ESE	0·0	0·0	0·0	40	134	0·17
11	Perigee	29·667	42·3	36·7	38·4	35·9	50·0	36·7	47·5	46·5	2·5	3·0	1·4	− 5·6	SE	E	0·0	0·0	0·0	25	134	0·00
12	. .	29·553	48·6	33·0	40·4	40·4	78·8	26·0	47·0	46·0	0·0	2·7	0·0	− 3·5	Calm	ENE	0·0	0·0	0·0	50	168	0·00
13	New	29·430	48·0	35·7	42·4	41·0	69·0	36·0	47·0	46·0	1·4	4·0	0·0	− 1·1	E	E	0·0	0·0	0·0	15	87	0·00
14	. .	29·404	49·3	35·5	43·7	43·3	53·0	40·9	47·0	46·0	0·4	4·4	0·0	+ 0·4	Variable	SW : S	6·0	0·0	2·5	135	307	0·15
15	Greatest Declination S.	29·218	52·9	42·1	43·8	41·9	76·0	42·0	47·0	46·0	3·9	6·7	1·5	+ 2·8	SW ; W	WSW	6·0	0·0	2·5	165	338	0·23
16	. .	29·473	49·0	37·1	42·6	39·6	72·0	30·0	47·0	46·0	3·0	5·3	2·1	0·0	SW	SW	3·5	0·0	0·5	50	125	0·00
17	. .	29·166	44·0	33·5	38·3	37·4	44·0	34·3	46·5	45·5	0·9	2·2	0·0	− 4·1	SSE	N ; NW	4·5	0·0	0·7	130	310	0·65
18	. .	29·752	39·5	33·1	36·6	29·7	53·0	28·0	45·5	44·5	6·9	9·7	4·5	− 5·6	NW	NW	6·0	0·0	2·0	130	341	0·00
19	. .	29·967	42·8	33·3	37·8	34·5	52·0	30·0	45·0	44·0	3·3	7·9	1·3	− 4·4	NW	NW ; Calm	3·0	0·0	0·5	45	171	0·00
20	First Qr.	29·857	48·0	34·4	41·1	39·3	68·0	28·6	45·0	44·0	1·8	4·0	0·0	− 1·1	Calm	SW	0·0	0·0	0·0	40	158	0·00
21	. .	29·550	47·5	33·7	41·7	41·6	48·0	28·0	44·0	43·0	0·1	1·7	0·0	− 0·3	S	S	7·0	0·0	1·8	180	371	0·25
22	In Equator ; Apogee.	29·364	49·8	37·7	43·5	42·7	73·0	34·7	44·0	43·0	0·8	4·4	0·0	+ 1·8	W	SW	0·0	0·0	0·0	35	123	0·08
23	. .	29·536	44·6	31·5	37·6	37·5	75·0	26·4	44·0	43·0	0·1	1·3	0·0	− 3·8	Calm	Calm	0·0	0·0	0·0	20	71	0·00
24	. .	29·600	42·8	37·5	39·9	38·6	48·0	29·0	44·0	43·0	1·3	3·5	0·0	− 1·1	Calm	Calm	0·0	0·0	0·0	25	129	0·00
25	. .	29·361	42·5	35·3	38·5	36·3	47·6	28·5	43·5	42·5	2·2	3·7	1·2	− 2·3	NE	Calm	0·0	0·0	0·0	55	183	0·05
26	. .	29·265	40·0	35·5	37·3	36·5	48·0	32·0	43·0	42·0	0·8	2·2	0·0	− 3·6	Calm	NE	3·0	0·0	0·2	70	206	0·45
27	. .	29·313	47·2	35·6	42·3	41·4	69·0	33·0	43·0	42·0	0·9	2·7	0·0	+ 1·2	NE	E	2·5	0·0	0·1	60	188	0·00
28	Full	29·615	43·5	38·5	40·4	38·4	49·0	34·4	43·0	42·0	2·0	2·6	0·9	− 1·1	E	SE	2·0	0·0	0·1	70	182	0·00
29	Greatest Declination N.	29·626	44·2	37·7	41·7	41·7	46·4	33·0	42·0	41·0	0·0	0·4	0·0	+ 0·1	SE	E	5·0	0·0	0·6	70	180	0·27
30	. .	29·502	50·0	40·9	45·3	44·9	53·7	40·0	42·0	41·0	0·4	3·2	0·0	+ 3·7	Calm	WSW	3·5	0·0	0·4	115	238	0·19
Means	. .	29·696	46·7	35·3	40·8	38·9	64·5	30·9	46·6	45·6	2·0	4·8	0·7	− 2·4	. . .	. . .	. .	. .	. .	Sum 1970	Sum 5530	Sum 2·50

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first minimum in the month was $29^{in}\cdot900$ on the 1st.
The absolute maximum in the month was $30^{in}\cdot359$ on the 7th ; the second minimum ,, was $29^{in}\cdot139$ on the 15th.
The second maximum ,, was $29^{in}\cdot484$ on the 16th ; the absolute minimum ,, was $29^{in}\cdot103$ on the 17th.
The third maximum ,, was $29^{in}\cdot983$ on the 19th ; the fourth minimum ,, was $29^{in}\cdot351$ on the 22nd.
The fourth maximum ,, was $29^{in}\cdot658$ on the 24th ; the fifth minimum ,, was $29^{in}\cdot252$ on the 26th.
The fifth maximum ,, was $29^{in}\cdot712$ on the 29th ; the sixth minimum ,, was $29^{in}\cdot462$ on the 30th.
The range in the month was $1^{in}\cdot256$.
The mean for the month was $29^{in}\cdot696$, being $0^{in}\cdot064$ *lower* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 55°·3 on the 1st ; the lowest was 28°·5 on the 3rd ; and the range in the month was 26°·8.
The mean ,, of all the highest daily readings was 46°·7, being 2°·7 *lower* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 35°·3, being 2°·6 *lower* than the average of the preceding 19 years.
The mean daily range was 11°·4, being 0°·2 *lower* than the average of the preceding 19 years.
The mean for the month was 40°·8, being 2°·7 *lower* than the average of the preceding 19 years.

MONTH and DAY, 1860.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Nov. 1	v	v	8, ci.-cu, ci.-s : 2, ci	2, ci.-cu, ci : 10, cu, cu.-s
2	s	s	0, h.-fr	0
3	s	s	10, th.-f : 0	0 : f
4	w	w	10	10
5	w	w	10, ci.-s, sc	10
6	w	w	10	10
7	w	w	10, s, ci.-s	10, ci.-cu, ci.-s : 0
8			10, h.-fr	10, ci.-cu ci.-s : 0
9			10	10, oc.-r : 5, ci.-s, ci : 10
10			10, h.-r	10, fr.-r
11			10	10, ci.-s : 7, li.-cl
12			10, ci.-cu, ci.-s, h.-fr	10, cu.-s, ci.-s
13			10, ci.-s, h	10, ci.-s : 10, f
14			10, th.-r	10 : 10, h.-r
15			10, h.-r : 7, ci.-cu, ci.-s	5, ci.-cu, ci.-s : m
16			5, ci.-cu, ci.-s	5, ci.-cu, ci.-s : f
17			10, r	10, h.-r
18			5, ci, h	0 : 10, ci.-s
19			7, ci.-cu, ci.-s, f	7, ci.-cu, ci.-s
20			10	10, ci.-cu, ci.-s
21			10, oc.-r	10, r
22		w	10, r : 5, ci.-cu, ci.-s	7, ci.-s, ci, h
23	0	0	10, th.-f : 7, ci.-cu, ci.-s	0, h : 10.
24	0	0	10	10 : 9, ci.-cu, ci : 0 ci.-s, sc
25	0	0	7, s, ci, li.-cl : 10, oc.-r	10, oc.-r
26	0	0	10 : 10, r	10, r
27	0	0	10, ci.-s, sc	7, ci.-s, sc : 10, ci.-s, sc
28	0	0	10	10, sl.-r
29	0	w	10, h	10, oc.-r
30	0	0	10 : 10, oc.-r	10, oc.-r : 10 : 0

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 48°·3 on the 30th; and the lowest was 29°·2 on the 18th.

The mean " was 38°·9, being 1°·3 *lower* than the average of the preceding 19 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot237$ being $0^{in}\cdot019$ *less* than the average of the preceding 19 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{gr}\cdot7$, being $0^{gr}\cdot2$ *less* than the average of the preceding 19 years.

Degree of Humidity.—The mean for the month was 93 (that of the Saturation being represented by 100), being 1 [illegible] than the average of the preceding 19 years.

Weight of a Cubic Foot of Air.—The mean for the month was 550 grains, being 3 grains *greater* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·9.

WIND.

The proportions were; N. 7, S. 5, W. 5, and E. 13. The greatest pressure in the month was $7^{lbs}\cdot0$ on the square foot on the 21st.

RAIN.

Fell on 11 days in the month, amounting to $2^{in}\cdot5$, as measured in the simple cylinder gauge partly sunk below the ground; being [illegible] greater than the average [illegible] of the preceding 45 years.

ELECTRICITY.—November 8 to 22. The insulating lamp was not burning

MONTH and DAY, 1860.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 19 Years.	WIND AS DEDUCED FROM ANEMOMETERS.							Rain in Inches read at 9h P.M.
			Dry.			Dew Point.	Highest in the Sun, as shown by a Self-Registering Thermometer read at 9h P.M.	Lowest on the Grass, as shown by a Self-Registering Thermometer read at 9h A.M. next morning.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. next morning.						OSLER'S.					Amount of Horizontal Movement of the Air on each Day.		
															General Direction.		Pressure in lbs. on the square foot.			Whitwell's	Robinson's	
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.			
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	miles	in.
Dec. 1	..	29·639	49·8	37·6	45·5	44·4	66·0	33·0	42·0	41·0	1·1	3·4	0·6	+ 3·8	SW ; S	SSE	3·0	0·0	0·3	105	223	0·00
2	..	29·473	47·8	40·5	45·0	43·8	49·0	41·5	42·5	41·5	1·2	2·5	1·1	+ 3·2	SE	SE	4·0	0·0	0·2	95	225	0·04
3	..	29·303	46·0	40·9	43·6	42·9	55·5	37·5	43·0	42·0	0·7	1·5	0·0	+ 1·9	E	E	2·5	0·0	0·1	60	151	0·25
4	..	29·215	46·9	41·3	44·6	44·6	48·0	39·0	43·0	42·0	0·0	0·7	0·0	+ 3·1	E	E	0·0	0·0	0·0	20	104	0·09
5	Last Qr.	29·286	48·2	40·8	44·6	44·0	50·0	36·5	43·0	42·0	0·6	2·0	0·0	+ 2·6	E	SW	0·0	0·0	0·0	90	205	0·02
6	In Equator	29·108	54·0	45·5	49·8	49·1	54·0	34·7	43·0	42·0	0·7	1·5	0·2	+ 8·0	S	SW	13·0	0·0	1·5	190	388	0·07
7	..	28·974	52·2	47·3	49·9	46·2	58·0	43·0	43·5	42·5	3·7	5·2	2·5	+ 5·5	SW	SW	6·0	0·0	2·0	125	299	0·02
8	Perigee	28·702	48·1	41·5	44·8	44·1	57·0	34·0	44·5	43·5	0·7	2·5	0·4	+ 3·5	S	S	1·5	0·0	0·0	40	152	0·47
9	..	28·858	46·5	39·8	42·7	41·6	58·0	34·5	45·0	44·0	1·1	1·8	0·2	+ 2·2	SSE	W	0·0	0·0	0·0	50	177	0·15
10	..	29·536	46·2	36·7	41·4	39·8	63·0	30·0	44·5	43·5	1·6	3·1	0·9	+ 1·0	W	W	0·0	0·0	0·0	20	123	0·00
11	.	29·528	44·0	33·8	39·6	39·2	46·0	30·0	44·5	43·5	0·4	2·5	0·0	— 0·6	W	NNE	5·0	0·0	0·8	105	314	0·03
12	New ; Greatest Dec. S.	29·880	42·6	37·8	40·8	38·1	54·0	31·0	44·0	43·0	2·7	4·4	1·4	+ 0·8	N	N	3·5	0·0	0·4	55	217	0·00
13	..	29·981	43·2	37·6	40·4	38·5	51·0	32·0	44·0	43·0	1·9	2·6	0·0	+ 0·8	N	N ; NE	0·0	0·0	0·0	10	93	0·00
14	..	30·120	41·8	36·7	38·8	37·0	45·0	33·7	43·0	42·0	1·8	2·5	0·2	— 0·9	NE	NE	0·0	0·0	0·0	..	58	0·00
15	..	30·113	41·2	31·3	36·2	36·0	42·0	27·6	42·5	41·5	0·2	2·3	0·0	— 3·8	N	NNW	0·0	0·0	0·0	15	123	0·03
16	..	29·811	41·0	35·2	38·[illegible]	35·7	45·0	29·3	42·0	41·0	2·7	3·5	1·5	— 1·9	NW	NW	3·0	0·0	0·0	90	255	0·06
17	..	29·513	37·8	33·3	35·4	33·2	50·0	29·0	41·5	40·5	2·2	3·4	0·3	— 4·7	N	NNW	4·0	0·0	0·3	70	293	0·13
18	..	29·414	34·6	26·7	30·5	27·2	42·0	15·5	40·5	39·5	3·3	4·2	2·3	— 9·4	NW	W	0·0	0·0	0·0	10	65	0·00
19	In Equator	29·289	37·0	24·0	30·1	26·2	64·0	13·0	40·5	39·5	3·9	8·1	2·6	— 9·4	W	SE ; E	0·0	0·0	0·0	10	122	0·00
20	First Quarter; Apogee.	29·663	32·5	24·9	29·0	25·6	46·3	14·0	39·5	38·5	3·4	5·6	2·7	—10·0	E	NNW	3·0	0·0	0·2	75	292	0·00
21	..	29·724	34·0	28·1	30·6	26·7	41·0	17·0	38·5	37·5	3·9	4·7	2·9	— 7·8	N by W	N	5·0	0·0	2·0	145	390	0·10
22	..	29·683	33·0	29·2	31·0	26·8	35·5	26·8	38·0	37·0	4·2	6·3	3·2	— 6·9	N by E	N	4·0	0·0	1·5	45	236	0·00
23	..	29·467	30·7	21·5	26·0	19·5	44·0	20·0	..	..	6·5	7·4	5·9	—11·4	W	SW	0·0	0·0	0·0	..	55	0·00
24	..	29·315	28·2	16·5	22·4	17·1	30·0	15·2	..	..	5·3	7·2	4·6	—14·6	SW	WSW	0·0	0·0	0·0	..	80	0·00
25	..	29·226	30·0	8·0	20·2	12·7	32·6	2·0	..	..	7·5	15·8	6·0	—16·3	Calm	Calm ; NE	0·0	0·0	0·0	15	203	0·00
26	Greatest Declination N.	29·405	35·0	26·2	30·2	21·9	44·0	16·0	..	..	8·3	12·2	5·9	— 6·2	NE	SE	3·0	0·0	0·2	95	225	0·00
27	..	29·360	34·5	28·0	31·2	28·0	40·0	18·5	..	..	3·2	4·6	0·8	— 5·3	SE	E	5·0	0·0	0·6	30	189	0·36
28	Full	29·883	35·0	24·4	28·2	18·8	40·0	20·0	..	..	9·4	12·1	7·4	— 8·8	NE	Calm	0·0	0·0	0·0	5	36	0·00
29	..	30·121	31·8	10·0	23·0	15·0	45·0	..	..	..	8·0	15·8	6·7	—14·3	Calm	SE	4·0	0·0	0·2	95	255	0·00
30	..	29·290	44·7	32·0	38·3	38·3	46·0	15·8	34·0	33·0	0·0	1·0	0·0	+ 0·9	S	W	5·0	0·0	1·0	55	123	0·79
31	..	29·511	39·8	33·5	35·5	34·4	42·0	28·8	34·0	33·0	1·1	4·4	0·3	+ 2·1	N	N ; SE	0·0	0·0	0·0	95	200	0·14
Means	..	29·491	40·6	32·0	36·3	33·4	47·9	26·6	41·7	40·7	2·9	5·0	1·9	— 3·0	...	...	..	..	..	Sum 1815	Sum 5871	Sum 2·75

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29in·672 on the 1st; the first minimum in the month was 29in·213 on the 4th.
The second maximum ,, was 29in·376 on the 5th; the absolute minimum ,, was 28in·632 on the 8th.
The third maximum ,, was 30in·134 on the 15th; the third minimum ,, was 29in·262 on the 19th.
The fourth maximum ,, was 29in·744 on the 21st; the fourth minimum ,, was 29in·177 on the 25th.
The fifth maximum ,, was 29in·435 on the 26th; the fifth minimum ,, was 29in·320 on the 27th.
The absolute maximum ,, was 30in·230 on the 29th; the sixth minimum ,, was 29in·253 on the 30th.
The seventh maximum ,, was 29in·554 on the 31st.
The range in the month was 1in·598. The mean for the month was 29in·491, being 0in·330 *lower* than the average of the preceding 19 years.

TEMPERATURE OF THE AIR.

The highest in the month was 54°·0 on the 6th; the lowest was 8°·0 on the 25th; and the range in the month was 46°·0.
The mean ,, of all the highest daily readings was 40°·6, being 4°·6 *lower* than the average of the preceding 19 years.
The mean ,, of all the lowest daily readings was 32°·0, being 3°·7 *lower* than the average of the preceding 19 years.
The mean daily range was 8°·6, being 0°·9 *lower* than the average of the preceding 19 years.
The mean for the month was 36°·3, being 4°·0 *lower* than the average of the preceding 19 years.

MONTH and DAY, 1860.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Dec. 1	0	0	0	10, ci.-s, ci : 10, h.-r
2	0	0	7	7 : 10, r
3	0 : s, N	s, N : 0	10, ci.-s	10, ci.-s, oc.-r : 5
4	0	0	10, fr.-r	10, r : 10, r
5	0	0	10, f	10, th.-r : 10 : 0
6	0	0	10, th.-r	10, h.-r
7	0	0	7, ci.-cu, ci.-s	10, oc.-r : 9, cu.-s, ci.-s : 10, h.-r
8			10, s, ci.-s	10, h.-r : 10, th.-r : 0
9			10, ci.-s, f	5, ci, h : 10
10	0	0 : w	0	5, ci.-cu, ci : 0
11	0	s, N : 0	10, th.-f : 10, th.-r	10, s, ci.-s, sc
12	w	0 : m	10, ci.-s, h	10, ci.-s, ci, th.-r : 10, oc.-r
13	0	0	10, f	10 : 0
14	0	0	10	10 : 2, ci.-s, h
15	w : 0	0	10, th.-f	10 : 10, oc.-r
16	0	0	10, f	10 : 10, h.-r
17	N, w : 0	0	10, oc.-r	0 : 5
18	0	0 : w	0, h.-fr	7, ci.-cu, ci : 0, h.-fr
19	0	0 : m	0, h.-fr	0 : 6, ci : 9, ci.-s
20	0	0	0, h.-fr	10, cu.-s, ci.-s
21	0	m	10, ci.-s, sn	10, ci.-s, oc.-sn
22	0	0	10, sn	10, sn, sl : 10, cu.-s, ci.-s, sc
23	s	s	7, ci.-cu, ci, li.-cl	7, ci.-s : 0
24	0	0 : w	10, ci.-s, h	10, ci.-s, h : 0, f
25	0	0	0, h.-fr	10, ci, so.-ha
26	0	w	0	0, : 10, ci.-s, lu.-ha
27	0	0 : s	10, sn	10, sn
28	0	0	7, ci.-cu, ci.-s	8, ci.-cu, ci.-s, ci : 0 : ci.-s, r
29	0	s	7, ci, h.-fr	5, ci : 10, ci.-s
30	0	0 : m	10, sn, hl, r	10, th.-r
31	0	s	10	10, r

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 52°·4 on the 6th; and the lowest was −1°·3 on the 25th and 29th.
The mean „ was 33°·4, being 3°·7 *lower* than the average of the preceding 19 years.

Elastic Force of Vapour.—The mean for the month was 0in·191, being 0in·030 *less* than the average of the preceding 19 years.
Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 2gr·2, being 0gr·4 *less* than the average of the preceding 19 years.
Degree of Humidity.—The mean for the month was 92 (that of Saturation being represented by 100), being 3 *greater* than the average of the preceding 19 years.
Weight of a Cubic Foot of Air.—The mean for the month was 551 grains, being 1 grain *less* than the average of the preceding 19 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·9.

WIND.

The proportions were of N. 9, S. 7, W. 8, and E. 7. The greatest pressure in the month was 13lbs·0 on the square foot on the 6th.

RAIN.

Fell on 16 days in the month, amounting to 2in·8, as measured in the simple cylinder gauge partly sunk below the ground; being 0in·9 *greater* than the average fall of the preceding 45 years.

ELECTRICITY.—December 8 and 9. The insulating lamp was out.

Maxima and Minima Readings of the Barometer.

The following table contains the highest and lowest readings of the Barometer, reduced to 32° Fahrenheit, extracted from the photographic records. The readings are accurate; but the times are liable to great uncertainty, as the barometer frequently remains at its highest or lowest point through several hours. The time given is the middle of the stationary period. Where the symbol : follows the time, it denotes that the quicksilver has been sensibly stationary through a period of more than one hour.

MAXIMA.		MINIMA.		MAXIMA.		MINIMA.	
Approximate Mean Solar Time, 1860.	Reading.	Approximate Mean Solar Time, 1860.	Reading.	Approximate Mean Solar Time, 1860.	Reading.	Approximate Mean Solar Time, 1860.	Reading.
d h m	in.	d h m	in.	d h m	in.	d h m	in.
January 2. 9. 0	29·683	January 1. 6. 30:	29·385	April 22. 11. 0:	29·691	April 20. 22. 20:	29·593
7. 22. 30:	30·208	5. 3. 0:	28·653	29. 17. 0:	30·289	23. 7. 30:	29·545
12. 22. 30	30·070	11. 15. 45:	29·918	May 3. 12. 30:	30·110	May 2. 3. 30:	29·929
16. 6. 0:	30·125	15. 8. 30	29·646	10. 0. 0	29·712	8. 3. 0	29·427
20. 13. 15:	29·315	20. 1. 30:	29·139	15. 15. 20:	29·788	12. 15. 30	29·485
23. 3. 20:	29·280	21. 1. 30	28·777	20. 23. 30:	30·216	18. 1. 15:	29·218
25. 22. 0:	29·723	24. 1. 50	28·555	24. 9. 30	29·900	23. 8. 15:	29·736
28. 0. 0	29·973	26. 20. 0:	29·075	27. 2. 30:	29·651	26. 1. 53	29·205
February 3. 10. 0:	30·210	30. 9. 0	28·782	29. 0. 30:	29·889	27. 20. 0	29·363
6. 21. 0:	30·082	February 5. 15. 30:	29·595	June 1. 6. 0:	29·551	31. 11. 30:	29·447
10. 0. 0	29·968	8. 14. 0:	29·425	5. 10. 30:	29·738	June 2. 6. 30	28·974
13. 21. 45:	30·434	11. 1. 30:	29·644	8. 9. 0	29·730	7. 6. 45	29·573
17. 9. 0:	30·279	15. 21. 0:	29·960	10. 22. 10:	29·724	9. 12. 45:	29·422
23. 0. 30:	30·095	20. 5. 0:	29·313	14. 10. 0:	29·600	12. 4. 40:	29·280
27. 14. 10:	29·555	26. 19. 20:	28·975	18. 9. 50:	29·715	17. 0. 0:	29·386
March 0. 21. 0:	29·953	27. 22. 45	29·113	21. 23. 0	29·880	20. 3. 0:	29·500
2. 12. 30:	29·977	March 1. 22. 0:	29·822	26. 10. 45:	29·841	25. 0. 0	29·566
5. 22. 15:	30·397	4. 2. 30:	29·605	July 2. 11. 30:	30·253	27. 12. 0	29·606
7. 12. 0:	30·242	6. 18. 30:	29·880	4. 22. 20	30·145	July 4. 0. 0	30·002
13. 9. 50:	29·498	12. 16. 30:	29·293	6. 21. 20:	30·162	5. 17. 30:	29·987
18. 23. 35:	30·036	14. 4. 30:	29·269	15. 22. 0:	29·802	14. 1. 40:	29·651
22. 10. 30:	29·766	21. 1. 40	29·240	20. 10. 30:	29·730	19. 3. 20	29·526
26. 10. 30:	29·608	24. 4. 45:	28·899	22. 11. 30	29·735	21. 18. 5:	29·473
29. 22. 45	29·615	29. 3. 25	29·325	24. 23. 0:	29·863	23. 9. 0	29·504
April 1. 9. 0:	29·124	31. 10. 30	28·595	29. 22. 40	30·015	28. 2. 40:	29·582
7. 0. 30	29·789	April 2. 4. 10:	28·955	August 5. 0. 0:	29·564	August 3. 23. 30:	29·390
10. 22. 30:	30·062	8. 11. 0:	29·370	7. 11. 0:	29·765	6. 3. 0:	29·223
15. 21. 30	30·175	12. 23. 45:	29·822	9. 21. 35:	29·737	8. 5. 35:	29·464

MAXIMA AND MINIMA READINGS OF THE BAROMETER—*concluded.*

MAXIMA.			MINIMA.			MAXIMA.			MINIMA.		
Approximate Mean Solar Time, 1860.		Reading.	Approximate Mean Solar Time, 1860.		Reading.	Approximate Mean Solar Time, 1860.		Reading.	Approximate Mean Solar Time, 1860.		Reading.
	d h m	in.		d h m	in.		d h m	in.		d h m	in.
August	12. 9.45:	29·671	August	11. 4. 0:	29·427	October	18.21. 0	29·600	October	18. 6.45:	29·425
	21. 3. 0	29·806		16. 5.40:	29·217		20.21.30:	30·100		19. 9.45:	29·432
	22.23. 0:	29·737		22. 3.30:	29·312		29.21.40	30·073		26. 3. 0	29·791
	27.10.15:	29·747		24.11.10:	29·514	November	6.21. 0:	30·359	November	1. 3.30:	29·900
September	6.11. 0:	30·258		29.16.55	29·018		16. 0.15:	29·484		14.17.35:	29·090
	11.15. 0:	30·250	September	8. 4. 0:	29·890		19. 4.45:	29·983		17. 3.30:	29·103
	16. 0.45:	29·559		15. 2.30:	29·386		23.21. 0	29·658		21.17. 0:	29·249
	21. 5.30:	29·879		18.20.45:	29·305		28.21.50:	29·712		26. 3.45:	29·252
	25. 9.30	29·725		24.16. 0:	29·135		30.22.30	29·680		30. 1.40:	29·462
October	1.23. 0:	30·185		27. 4.55:	29·566	December	5. 9. 0:	29·376	December	4. 1.30	29·208
	3.22. 0:	30·276	October	2.22. 0:	29·958		14.22.45	30·144		8.10.30:	28·632
	5.21.30	30·193		5. 3. 0	29·892		20.20. 0:	29·744		19. 2. 0:	29·262
	9.12.15:	30·100		8.21.30:	29·812		26. 4.30:	29·435		25. 8.20:	29·177
	12. 4. 0:	29·773		10.18. 0:	29·295		28.20.45	30·230		26.21.25:	29·320
	14.11.45:	29·693		13.13. 0:	29·330		31. 3.30	29·554		30. 1. 0	29·253
	17. 8.20:	29·884		15.20.15:	29·365						

MONTHLY MEANS of RESULTS for METEOROLOGICAL ELEMENTS at the ROYAL OBSERVATORY, GREENWICH, in the Year 1860.

1860, MONTH.	Mean Reading of the Barometer.	TEMPERATURE OF THE AIR.							Mean Temperature of Dew Point.	Mean Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean additional Weight required to saturate a Cubic Foot of Air.
		Highest.	Lowest.	Range in the Month.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily Range.	Mean Temperature.				
	in.	°	°	°	°	°	°	°	°	in.	gr.	gr.
January ..	29·515	55·5	27·5	28·0	45·0	34·8	10·2	39·7	36·2	0·214	2·5	0·4
February..	29·857	53·5	23·2	30·3	42·5	30·1	12·4	35·7	30·4	0·170	2·0	0·4
March	29·657	59·5	23·5	36·0	49·2	35·0	14·2	41·1	35·0	0·204	2·4	0·6
April	29·796	65·0	28·2	36·8	53·7	35·6	18·1	42·9	36·7	0·218	2·5	0·7
May	29·746	76·5	32·5	44·0	65·5	44·6	20·9	53·8	46·1	0·312	3·5	1·1
June	29·613	74·0	43·5	30·5	65·0	48·5	16·5	54·8	49·7	0·357	4·0	0·9
July	29·845	75·0	41·6	33·4	69·2	50·1	19·1	57·6	52·3	0·393	4·4	0·9
August ...	29·556	70·8	45·5	25·3	67·2	51·8	15·4	57·7	52·5	0·396	4·4	0·9
September.	29·762	69·7	35·7	34·0	63·4	45·8	17·6	53·4	50·2	0·364	4·1	0·5
October ...	29·856	68·5	32·4	36·1	58·6	44·5	14·1	50·6	47·5	0·329	3·7	0·5
November .	29·696	55·3	28·5	26·8	46·7	35·3	11·4	40·8	38·9	0·237	2·7	0·3
December .	29·491	54·0	8·0	46·0	40·6	32·0	8·6	36·3	33·4	0·191	2·2	0·3
Means	29·699	64·8	30·9	33·9	55·6	40·7	14·9	47·0	42·4	0·282	3·2	0·6

1860, MONTH.	Mean Degree of Humidity. (Sat. = 100.)	Mean Weight of a Cubic Foot of Air.	Mean Amount of Cloud. 0—10	RAIN.		WIND.											
						From Osler's Anemometer.										From Whewell's Anemometer.	From Robinson's Anemometer.
				Number of Rainy Days.	Amount collected on the Ground.	Number of Days for Mean Direction of the Wind referred to different Points of Azimuth.								Number of Calm Days and Days on which the Pressure of the Wind was less than ¼ lb. on the Sq. Foot.	Mean Daily Pressure in lbs. on Square Foot.	Mean Daily Horizontal Movement of Wind in Miles.	
						N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.				
		gr.			in.												
January...	88	548	6·9	21	1·8	2	0	1	4	5	12	4	3	0	1·44	159	247
February..	80	559	6·5	13	1·1	6	7	1	0	3	4	5	3	0	1·82	132	313
March	79	549	7·5	18	1·9	2	3	0	0	1	11	8	6	0	1·57	146	342
April.....	79	549	7·0	13	1·0	3	10	3	2	1	3	4	4	0	1·09	99	260
May......	75	536	6·5	14	3·9	0	2	5	2	1	11	7	2	1	0·89	91	246
June......	82	532	7·9	23	5·8	2	1	0	2	1	19	5	0	0	0·85	115	269
July......	83	534	8·3	10	2·8	6	7	1	0	0	10	1	5	1	0·15	57	172
August ...	83	528	8·3	25	3·7	1	0	0	0	2	17	9	2	0	0·85	120	..
September.	88	537	7·4	17	3·1	4	4	1	2	1	10	5	1	2	0·35	69	200
October...	89	541	6·8	10	1·6	0	2	0	2	2	14	10	1	0	0·70	102	260
November .	93	550	7·9	11	2·5	0	8	8	2	2	5	1	2	2	0·57	66	184
December .	92	551	7·9	17	2·8	4	3	6	3	3	4	5	2	1	0·36	65	190
Means	84	543	7·4	Sum 192	Sum 32·0	Sum 30	Sum 47	Sum 26	Sum 19	Sum 22	Sum 120	Sum 64	Sum 31	Sum 7	..	..	..

During the greater part of the month of August, Robinson's Anemometer was under repair. Whewell's Anemometer was not at work during 10 days of January; and Robinson's Anemometer was not at work during 5 days of January, 11 days of February, and 12 days of April. The mean horizontal movement for these months has been formed from the remaining days.

READINGS OF THERMOMETERS SUNK IN THE GROUND.

(I.)—Reading of a Thermometer whose bulb is sunk to the depth of 25·6 feet (24 French feet) below the surface of the soil, at Noon on every Day generally, except Sundays, Good Friday, and Christmas Day.

Day of the Month, 1860.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	*S*	51 ·55	50 ·65	*S*	48 ·92	48 ·51	*S*	49 ·25	50 ·07	50 ·76	51 ·29	51 ·35
2	52 ·48	51 ·52	50 ·60	49 ·57	48 ·90	48 ·44	48 ·65	49 ·26	*S*	50 ·80	51 ·27	*S*
3	52 ·48	51 ·49	50 ·58	49 ·55	48 ·88	*S*	48 ·66	49 ·30	50 ·12	50 ·83	51 ·27	51 ·34
4	52 ·42	51 ·46	*S*	49 ·55	48 ·85	48 ·50	48 ·70	49 ·32	50 ·15	50 ·83	*S*	51 ·35
5	52 ·40	*S*	50 ·52	49 ·51	48 ·83	48 ·49	48 ·70	*S*	50 ·18	50 ·86	51 ·27	51 ·35
6	52 ·37	51 ·40	50 ·48	GoodFriday.	*S*	48 ·47	48 ·72	49 ·38	50 ·20	50 ·90	51 ·30	51 ·36
7	52 ·34	51 ·35	50 ·32	49 ·47	48 ·80	48 ·47	48 ·72	49 ·39	50 ·22	*S*	51 ·30	51 ·35
8	*S*	51 ·35	50 ·35	*S*	48 ·78	48 ·47	*S*	49 ·40	50 ·26	50 ·90	51 ·29	51 ·34
9	52 ·28	51 ·30	50 ·35	49 ·40	48 ·77	48 ·46	48 ·76	49 ·44	*S*	50 ·88	51 ·28	*S*
10	52 ·30	51 ·25	50 ·33	49 ·36	48 ·77	*S*	48 ·78	49 ·48	50 ·29	50 ·90	51 ·28	51 ·32
11	52 ·23	51 ·23	*S*	49 ·35	48 ·75	48 ·47	48 ·80	49 ·50	50 ·32	50 ·91	*S*	51 ·30
12	52 ·22	*S*	50 ·28	49 ·30	48 ·73	48 ·45	48 ·80	*S*	50 ·34	50 ·91	51 ·30	51 ·26
13	51 ·50	51 ·17	50 ·24	49 ·27	*S*	48 ·47	48 ·80	49 ·55	50 ·36	50 ·96	51 ·31	51 ·29
14	52 ·15	51 ·12	50 ·20	49 ·26	48 ·72	48 ·47	48 ·87	49 ·58	50 ·40	*S*	51 ·32	51 ·26
15	*S*	51 ·10	50 ·17	*S*	48 ·70	48 ·47	*S*	49 ·56	50 ·40	51 ·00	51 ·33	51 ·23
16	52 ·08	51 ·07	50 ·15	49 ·20	48 ·63	48 ·49	48 ·90	49 ·64	*S*	51 ·03	51 ·30	*S*
17	52 ·05	51 ·05	50 ·12	49 ·20	48 ·60	*S*	48 ·92	49 ·65	50 ·45	51 ·05	51 ·32	51 ·20
18	51 ·97	51 ·02	*S*	49 ·18	48 ·60	48 ·50	48 ·92	49 ·66	50 ·40	51 ·05	*S*	51 ·17
19	52 ·00	*S*	50 ·05	49 ·12	48 ·60	48 ·50	48 ·95	*S*	50 ·48	51 ·06	51 ·32	51 ·15
20	51 ·97	50 ·93	50 ·02	49 ·10	*S*	48 ·50	48 ·97	49 ·73	50 ·52	51 ·10	51 ·30	51 ·13
21	51 ·93	50 ·91	49 ·96	49 ·10	48 ·60	48 ·51	48 ·97	49 ·77	50 ·52	*S*	51 ·34	51 ·12
22	*S*	50 ·87	49 ·93	*S*	48 ·60	48 ·52	*S*	49 ·77	50 ·56	51 ·07	51 ·35	51 ·12
23	51 ·86	50 ·85	49 ·90	49 ·03	48 ·54	48 ·53	49 ·03	49 ·80	*S*	51 ·16	51 ·28	*S*
24	51 ·83	50 ·80	49 ·85	49 ·00	48 ·54	*S*	49 ·00	49 ·83	50 ·58	51 ·19	51 ·36	51 ·09
25	51 ·80	50 ·78	*S*	49 ·00	48 ·52	48 ·56	49 ·06	49 ·86	50 ·57	51 ·22	*S*	Christmas Day.
26	51 ·75	*S*	49 ·80	48 ·84	48 ·53	48 ·57	49 ·10	*S*	50 ·62	51 ·22	51 ·35	51 ·07
27	51 ·72	50 ·72	49 ·76	48 ·90	*S*	48 ·57	49 ·07	49 ·92	50 ·65	51 ·22	51 ·36	51 ·07
28	51 ·64	50 ·72	49 ·75	48 ·95	48 ·47	48 ·58	49 ·13	49 ·95	50 ·68	*S*	51 ·36	51 ·05
29	*S*	50 ·67	49 ·72	*S*	48 ·52	48 ·60	*S*	49 ·98	50 ·70	51 ·23	51 ·34	51 ·03
30	51 ·64		49 ·68	48 ·93	48 ·52	48 ·62	49 ·18	50 ·02	*S*	51 ·28	51 ·35	*S*
31	51 ·60		49 ·65		48 ·50		49 ·21	50 ·05		51 ·26		51 ·02
Means	52 ·07	51 ·11	50 ·12	49 ·21	48 ·67	48 ·51	48 ·90	49 ·63	50 ·40	51 ·02	51 ·31	51 ·21

January 13. The reading is evidently erroneous; it has not been used in deducing the mean.

(II.)—Reading of a Thermometer whose bulb is sunk to the depth of 12 ·8 feet (12 French feet) below the surface of the soil, at the same times.

Day of the Month, 1860.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	*S*	47 ·93	46 ·30	*S*	45 ·95	47 ·92	*S*	52 ·40	53 ·62	54 ·03	52 ·97	51 ·17
2	49 ·57	47 ·90	46 ·22	45 ·33	45 ·96	47 ·90	50 ·21	52 ·45	*S*	54 ·03	52 ·90	*S*
3	49 ·52	47 ·82	46 ·18	45 ·33	45 ·97	*S*	50 ·32	52 ·50	53 ·70	54 ·05	52 ·83	50 ·97
4	49 ·36	47 ·83	*S*	45 ·38	45 ·96	48 ·23	50 ·40	52 ·56	53 ·72	54 ·00	*S*	50 ·91
5	49 ·32	*S*	46 ·07	45 ·38	45 ·98	48 ·30	50 ·44	*S*	53 ·82	53 ·98	52 ·78	50 ·82
6	49 ·23	47 ·65	45 ·98	GoodFriday.	*S*	48 ·38	50 ·51	52 ·61	53 ·72	53 ·98	52 ·76	50 ·79
7	49 ·18	47 ·63	45 ·93	45 ·40	46 ·05	48 ·50	50 ·61	52 ·67	53 ·78	*S*	52 ·72	50 ·72
8	*S*	47 ·60	45 ·90	*S*	46 ·10	48 ·59	*S*	52 ·69	53 ·78	53 ·88	52 ·70	50 ·62
9	49 ·10	47 ·53	45 ·82	45 ·55	46 ·13	48 ·64	50 ·72	52 ·72	*S*	53 ·76	52 ·70	*S*
10	49 ·03	47 ·43	45 ·80	45 ·50	46 ·18	*S*	50 ·79	52 ·77	53 ·85	53 ·74	52 ·62	50 ·46
11	49 ·01	47 ·40	*S*	45 ·50	46 ·23	48 ·82	50 ·86	52 ·82	53 ·88	53 ·74	*S*	50 ·40
12	49 ·00	*S*	45 ·78	45 ·50	46 ·30	48 ·83	50 ·95	*S*	53 ·85	53 ·66	52 ·54	50 ·29

(II.)—Reading of a Thermometer whose bulb is sunk to the depth of 12 French feet—*concluded.*

Day of the Month, 1860.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
13	48·90	47·26	45·70	45·53	*S*	48·92	51·00	52·92	53·95	53·70	52·52	50·30
14	48·92	47·25	45·70	45·55	46·41	49·05	51·10	52·97	53·96	*S*	52·48	50·20
15	*S*	47·20	45·60	*S*	46·49	49·08	*S*	52·97	53·96	53·65	52·47	50·15
16	48·82	47·15	45·60	45·63	46·44	49·18	51·25	53·06	*S*	53·60	52·37	*S*
17	48·77	47·10	45·58	45·68	46·50	*S*	51·35	53·06	54·00	53·60	52·26	50·00
18	48·60	47·04	*S*	45·70	46·61	49·30	51·39	53·07	53·95	53·55	*S*	49·90
19	48·66	*S*	45·50	45·66	46·70	49·38	51·42	*S*	54·00	53·50	52·10	49·86
20	48·62	46·90	45·50	45·70	*S*	49·48	51·53	53·19	54·03	53·48	52·08	49·82
21	48·55	46·86	45·45	45·72	46·83	49·54	51·58	53·22	54·03	*S*	52·01	49·76
22	*S*	46·77	45·42	*S*	47·00	49·58	*S*	53·22	54·03	53·42	51·93	49·72
23	48·45	46·73	45·40	45·78	47·03	49·68	51·72	53·28	*S*	53·37	51·86	*S*
24	48·40	46·65	45·40	45·74	47·07	*S*	51·77	53·29	54·00	53·30	51·82	49·68
25	48·30	46·60	*S*	45·82	47·13	49·77	51·90	53·37	53·95	53·30	*S*	Christmas Day.
26	48·27	*S*	45·35	45·67	47·24	49·82	52·02	*S*	53·98	53·27	51·60	49·52
27	48·18	46·48	45·32	45·72	*S*	49·86	52·02	53·38	54·03	53·21	51·50	49·50
28	48·15	46·45	45·38	45·87	47·37	49·92	52·19	53·50	54·02	*S*	51·42	49·38
29	*S*	46·32	45·38	*S*	47·60	50·00	*S*	53·52	54·02	53·07	51·33	49·22
30	48·17		45·35	45·92	47·73	50·08	52·26	53·57	*S*	53·07	51·25	*S*
31	48·00		45·38		47·82		52·32	53·61		52·98		49·10
Means.	48·77	47·18	45·67	45·60	46·62	49·11	51·26	53·01	53·91	53·59	52·25	50·13

(III.)—Reading of a Thermometer whose bulb is sunk to the depth of 6·4 feet (6 French feet) below the surface of the soil, at the same times.

Day of the Month, 1860.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	*S*	44·92		*S*	46·08	52·03	*S*	56·76	57·39	55·78	53·48	48·64
2	45·36	44·70		44·45	46·17	51·94	54·87	56·72	*S*	55·72	53·48	*S*
3	45·60	44·75		44·60	46·40	*S*	54·88	56·78	57·43	55·60	53·48	48·52
4	45·80	44·75		44·70	46·63	52·20	54·90	56·83	57·41	55·49	*S*	48·53
5	46·12	*S*		44·80	46·89	52·22	55·00	*S*	57·40	55·46	53·23	48·60
6	46·30	44·50		Good Friday.	*S*	52·27	55·10	56·85	57·38	55·40	53·05	48·55
7	46·45	44·50		45·00	47·50	52·53	55·22	56·92	57·22	*S*	52·88	48·56
8	*S*	44·38		*S*	47·72	52·60	*S*	56·91	57·33	55·12	52·45	48·57
9	46·50	44·20		45·18	47·95	52·49	55·38	56·98	*S*	54·98	52·25	*S*
10	46·30	44·20		45·30	48·17	*S*	55·50	57·03	57·12	55·00	52·07	48·53
11	46·27	44·20		45·40	48·38	52·79	55·67	57·03	57·27	54·90	*S*	48·53
12	46·12	*S*		45·53	48·57	52·74	55·77	*S*	57·20	54·77	51·60	48·50
13	46·03	44·20		45·60	*S*	52·86	55·83	57·01	57·20	54·67	51·39	48·53
14	45·93	44·10		45·60	48·93	52·83	55·96	57·03	57·12	*S*	51·29	48·48
15	*S*	43·95		*S*	49·15	52·90	*S*	57·00	56·98	54·30	51·11	48·28
16	45·78	43·90		45·58	49·20	52·95	56·18	57·07	*S*	54·05	50·96	*S*
17	45·78	43·70		45·57	49·38	*S*	56·38	57·07	56·80	53·88	50·80	48·08
18	45·60			45·60	49·60	53·37	56·50	57·10	56·72	53·70	*S*	47·93
19	45·75			45·65	49·74	53·39	56·60	*S*	56·65	53·58	50·53	47·82
20	45·70			45·73	*S*	53·45	56·70	57·18	56·60	53·51	50·43	47·66
21	45·68			45·80	50·00	53·60	56·75	57·20	56·59	*S*	50·18	47·42
22	*S*			*S*	50·20	53·70	*S*	57·16	56·52	53·49	50·00	47·28
23	45·40			45·90	50·38	53·72	56·83	57·26	*S*	53·33	49·82	*S*
24	45·39			45·90	50·53	*S*	56·86	57·18	56·45	53·32	49·54	46·81
25	45·35		*S*	45·93	50·80	53·98	56·88	57·22	56·40	53·28	*S*	Christmas Day
26	45·30		44·00	45·78	51·06	54·13	56·93	*S*	56·42	53·21	49·32	46·40

(III.)—Reading of a Thermometer whose bulb is sunk to the depth of 6 French feet—*concluded*.

Day of the Month, 1860.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
27	45·08		44·03	45·75	*S*	54·31	56·83	57·20	56·39	53·22	49·23	46·18
28	45·04		44·03	45·90	51·50	54·46	56·68	57·22	56·23	*S*	49·13	45·73
29	*S*		44·01	*S*	51·83	54·53	*S*	57·28	56·05	53·28	48·97	45·52
30	45·10		44·03	46·00	51·97	54·69	56·77	57·26	*S*	53·47	48·80	*S*
31	45·00		44·18		52·01		56·63	57·68		53·34		44·83
Means.	45·72	..	..	45·47	49·14	53·18	56·06	57·07	56·89	54·29	51·13	47·71

At temperatures below 43°·50 the fluid of this thermometer descends below the scale; the readings from February 18 to March 24 were all less than 43°·50.

(IV.)—Reading of a Thermometer whose bulb is sunk to the depth of 3·2 feet (3 French feet) below the surface of the soil, at the same times.

Day of the Month, 1860.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	*S*	41·15	39·70	*S*	46·05	53·90	*S*	58·62	59·03	54·62	52·90	45·11
2	43·63	40·75	39·60	43·90	46·90	53·85	57·12	58·70	*S*	54·60	52·43	*S*
3	44·06	40·50	39·70	44·00	47·61	*S*	57·39	58·79	58·77	54·59	51·77	45·50
4	44·27	40·20	*S*	43·80	48·24	54·03	57·76	58·90	58·69	54·57	*S*	45·68
5	44·40	*S*	40·08	43·80	48·86	53·91	58·02	*S*	58·60	54·49	50·22	45·77
6	44·04	40·40	40·20	Good Friday.	*S*	54·00	58·20	59·04	58·39	54·19	49·58	45·88
7	43·77	40·65	40·15	44·30	49·33	54·10	58·50	59·10	58·47	*S*	49·20	46·07
8	*S*	40·30	39·95	*S*	49·51	54·09	*S*	58·80	58·45	54·40	48·82	46·32
9	42·80	40·70	39·88	44·94	49·88	54·10	58·60	58·70	*S*	54·30	48·50	*S*
10	42·37	40·73	39·70	45·03	50·20	*S*	58·80	58·60	58·55	53·77	48·12	46·22
11	42·05	40·30	*S*	44·70	50·37	54·27	58·90	58·52	58·12	53·11	*S*	46·02
12	41·90	*S*	39·67	44·40	50·66	54·32	58·98	*S*	57·60	52·74	47·34	45·60
13	41·95	39·50	39·70	44·15	*S*	54·53	59·10	58·75	57·23	52·04	47·20	45·44
14	41·85	39·00	39·80	44·10	51·38	54·60	59·50	58·80	57·00	*S*	47·11	45·21
15	*S*	38·90	40·05	*S*	51·62	54·55	*S*	58·80	56·99	51·43	47·23	45·00
16	42·40		40·10	44·05	51·80	54·79	60·03	59·03	*S*	51·32	47·48	*S*
17	42·53		40·23	44·50	52·00	*S*	60·23	59·12	57·10	51·60	47·23	44·30
18	42·12		*S*	44·77	51·96	55·36	60·13	58·92	57·13	51·53	*S*	43·90
19	41·80		41·57	44·80	51·90	55·35	60·02	*S*	57·20	51·40	46·32	43·38
20	41·70		41·95	44·90	*S*	55·77	60·02	58·53	56·83	51·64	45·88	42·68
21	41·85		42·10	44·70	52·55	56·07	59·82	58·79	56·60	*S*	45·53	42·03
22	*S*		42·40	*S*	53·10	56·29	*S*	58·90	56·85	51·58	45·32	41·55
23	41·70		42·20	44·47	53·70	56·47	59·40	58·90	*S*	51·30	45·54	*S*
24	41·53		42·20	44·30	54·20	*S*	59·12	58·62	56·77	51·55	45·47	40·95
25	41·70		*S*	44·25	54·75	57·22	58·82	58·56	56·32	52·09	*S*	Christmas Day
26	41·60		41·87	44·11	54·95	57·55	58·50	*S*	55·70	52·44	45·20	40·12
27	41·10		41·88	44·30	*S*	57·52	58·12	58·73	55·22	52·70	45·00	39·83
28	41·23		41·80	44·60	54·68	57·52	58·27	58·90	55·10	*S*	44·90	39·72
29	*S*	39·60	42·24	*S*	54·54	57·38	*S*	58·92	55·18	52·93	44·90	39·00
30	41·12		42·96	45·20	54·09	57·30	58·43	59·03	*S*	53·09	45·00	*S*
31	41·10		43·38		53·92		58·50	59·05		52·93		
Means.	42·33	..	40·93	44·42	51·44	55·34	58·86	58·82	57·28	52·85	47·47	43·80

At temperatures below 39°·70 the fluid of this thermometer descends below the scale: the readings on those days, which are slightly below this value, are estimated readings only, and therefore liable to some uncertainty. From February 16 to February 28 and on December 31 the readings were all below 39°·70, and mostly less than 39°.

(V.)—Reading of a Thermometer whose bulb is sunk to the depth of 1 inch below the surface of the soil, within the case which covers the tops of the deep-sunk Thermometers, at the same times.

Day of the Month, 1860.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	S	35·3	39·3	S	54·3	57·7	S	60·9	59·6	53·1	51·0	46·6
2	46·3	36·0	40·8	44·2	55·2	56·6	63·0	61·0	S	55·0	47·0	S
3	46·8	37·2	41·0	45·0	55·2	S	62·6	62·3	59·6	56·5	43·9	45·2
4	46·2	37·7	S	45·0	54·3	57·2	63·2	63·0	59·0	51·9	S	45·0
5	43·0	S	40·7	47·0	53·0	55·2	60·6	S	58·5	53·0	44·0	46·0
6	41·5	39·7	38·0	Good Friday.	S	53·7	63·0	61·2	59·8	55·0	45·0	47·1
7	38·0	37·7	39·7	49·0	54·0	55·0	60·2	59·8	58·6	S	45·3	48·3
8	S	43·0	38·3	S	55·2	57·2	S	57·9	60·7	53·6	43·5	48·0
9	38·0	40·0	36·8	46·0	57·0	56·1	61·2	58·9	S	46·0	43·0	S
10	37·9	35·0	35·0	43·0	55·3	S	59·7	60·2	56·0	47·2	43·0	44·0
11	39·0	36·0	S	42·3	57·2	57·3	61·7	60·1	56·0	50·7	S	42·9
12	41·7	S	39·7	44·6	59·0	58·0	63·0	S	54·6	44·1	42·0	42·9
13	39·0	34·6	40·0	44·0	S	57·2	62·0	60·9	56·2	49·0	45·0	42·3
14	42·7	34·0	41·0	43·0	57·6	57·3	63·7	62·0	58·8	S	46·0	42·9
15	S	35·0	39·0	S	58·0	57·0	S	61·4	58·0	49·7	46·0	39·7
16	42·0	37·0	42·0	48·0	56·0	60·2	64·0	63·9	S	53·8	44·6	S
17	39·3	37·0	46·0	47·0	56·2	S	65·0	59·0	60·0	51·0	44·7	39·5
18	36·6	39·5	S	47·0	56·0	57·0	63·4	57·3	57·0	51·8	S	36·7
19	41·3	S	45·0	43·0	55·5	57·7	61·3	S	56·0	53·0	40·6	35·0
20	43·0	36·0	46·0	44·0	S	61·0	62·8	61·7	57·3	52·0	41·8	34·5
21	41·0	38·0	46·0	43·0	60·5	61·2	59·8	60·0	57·8	S	41·8	35·0
22	S	38·0	42·4	S	61·7	61·3	S	59·2	59·3	50·6	45·7	34·9
23	39·0	35·5	43·0	43·8	61·0	61·8	59·0	58·1	S	54·0	41·9	S
24	41·5	35·0	41·7	40·8	61·2	S	58·5	58·0	54·2	55·3	42·3	31·2
25	40·0	35·0	S	45·0	60·8	60·8	57·7	60·3	51·4	56·1	S	Christmas Day
26	37·0	S	42·8	45·0	59·2	60·5	58·2	S	53·0	56·8	40·8	33·0
27	43·2	41·0	42·0	46·0	S	59·3	60·0	60·2	54·8	55·0	43·7	34·8
28	36·0	44·0	47·0	46·0	54·0	60·3	59·8	60·3	55·0	S	42·8	34·1
29	S	39·0	49·3	S	53·9	58·8	S	62·3	53·7	54·0	43·5	31·0
30	42·5		47·0	52·0	55·0	57·5	59·5	62·2	S	54·8	45·0	S
31	40·3		47·5		55·0		60·7	60·0		52·1		36·2
Means.	40·9	37·4	42·1	45·2	56·7	58·2	61·3	60·4	57·0	52·4	44·0	39·9

(VI.)—Reading of a Thermometer within the case covering the deep-sunk Thermometers, whose bulb is placed on a level with their scales, at the same times.

Day of the Month. 1860.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	S	33·0	46·0	S	65·0	63·0	S	66·3	67·2	54·2	57·2	48·5
2	49·0	35·0	42·2	40·3	65·8	55·5	72·0	63·2	S	60·0	51·9	S
3	53·3	39·0	48·0	50·0	64·8	S	67·2	66·0	66·8	63·0	48·7	44·5
4	46·2	39·5	S	53·7	62·7	62·9	70·1	67·2	65·5	56·3	S	45·4
5	42·0	S	44·0	53·9	52·4	59·3	67·2	S	67·0	58·6	43·7	46·8
6	40·3	39·0	41·3	Good Friday.	S	53·1	65·0	61·5	61·4	59·8	45·5	50·8
7	38·0	38·5	35·5	57·3	63·3	56·2	65·3	63·2	64·7	S	48·2	50·9
8	S	47·5	39·8	S	61·3	62·3	S	56·5	67·2	55·5	44·8	47·3
9	38·0	38·5	38·7	47·3	60·6	57·7	63·7	60·7	S	51·5	42·5	S
10	37·5	33·0	36·0	47·0	60·2	S	59·8	68·0	62·0	45·0	40·8	44·3
11	41·0	36·5	S	44·0	61·4	63·5	66·9	64·0	61·5	48·0	S	41·8
12	44·0	S	42·0	47·0	65·0	59·1	68·5	S	61·3	44·5	45·1	42·5
13	38·0	35·0	43·8	47·0	S	60·4	67·5	65·0	66·0	52·0	47·2	41·9
14	45·0	34·0	45·2	45·0	63·8	60·2	67·2	67·3	65·5	S	45·2	40·3
15	S	36·5	43·0	S	63·0	60·0	S	65·3	62·0	53·0	47·2	55·3

(VI.)—Reading of a Thermometer within the case covering the deep-sunk Thermometers—*concluded.*

Day of the Month, 1860.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
16	40·0	40·0	47·7	51·0	59·0	67·1	64·4	68·2	*S*	53·0	46·7	*S*
17	37·5	40·2	54·0	55·0	57·5	*S*	71·2	61·0	64·3	55·0	42·3	36·5
18	36·7	43·8	*S*	55·0	61·0	63·3	67·0	55·4	53·9	54·9	*S*	33·0
19	42·8	*S*	51·0	42·7	63·4	61·3	61·5	*S*	59·2	58·0	42·5	34·7
20	45·0	36·0	50·0	47·0	*S*	66·0	65·7	63·8	63·8	55·0	45·0	31·6
21	42·0	39·0	39·0	47·0	73·0	65·7	58·0	64·9	60·0	*S*	42·9	32·9
22	*S*	39·0	44·8	*S*	73·2	67·2	*S*	60·7	62·2	59·2	49·0	32·0
23	43·7	37·5	45·0	47·3	71·0	67·9	57·7	63·9	*S*	56·0	42·7	*S*
24	44·3	38·0	42·0	37·7	68·0	*S*	59·0	59·1	58·8	59·8	42·6	28·3
25	39·3	37·3	*S*	50·2	64·1	61·3	59·5	61·9	49·0	61·5	*S*	Christmas Day.
26	36·0	*S*	47·0	48·5	62·9	66·0	64·7	*S*	57·9	59·3	38·3	34·0
27	45·4	42·0	44·3	49·7	*S*	60·0	66·4	63·6	59·0	56·9	46·3	33·2
28	31·7	50·0	55·0	51·4	54·7	66·7	61·7	63·9	55·8	*S*	43·3	33·2
29	*S*	42·6	52·8	*S*	56·0	61·7	*S*	66·8	54·0	57·2	43·2	29·4
30	43·0		48·8	63·7	59·7	58·2	63·8	66·9	*S*	63·2	48·0	*S*
31	39·5		50·2		55·0		63·9	66·0		51·3		36·1
Means.	41·5	38·8	45·0	49·1	62·5	61·8	64·8	63·6	61·4	55·6	45·3	39·0

WEEKLY MEANS OF READINGS OF DEEP-SUNK THERMOMETERS, AND CHANGES OF THE DIRECTION OF THE WIND,

WEEKLY MEANS OF READINGS OF THERMOMETERS.

1860. Period.			Thermometers sunk in the ground.					Thermometer inclosed in the box which covers the scales of the deep-sunk Thermometers, and placed on a level with their scales.
			Bulb 24 French Feet deep.	Bulb 12 French Feet deep.	Bulb 6 French Feet deep.	Bulb 3 French Feet deep.	Bulb 1 Inch deep.	
	d	d	°	°	°	°	°	°
January	1 to	7	52·08	49·36	45·94	44·03	43·6	44·8
	8 to	14	52·15	48·99	46·19	42·15	39·7	40·6
	15 to	21	51·83	48·67	45·72	42·07	40·5	40·7
	22 to	28	51·77	48·28	45·26	41·48	39·5	40·1
	29 to February	4	51·54	47·94	44·87	40·80	38·2	38·2
February	5 to	11	51·31	47·54	44·33	40·51	38·6	38·8
	12 to	18	51·09	47·17	43·97	...	36·2	38·3
	19 to	25	50·86	46·75	...	...	36·3	37·8
	26 to March	3	50·66	46·33	...	...	40·9	45·1
March	4 to	10	50·39	45·88	...	39·99	38·1	39·2
	11 to	17	50·19	45·66	...	39·93	41·3	46·0
	18 to	24	49·95	45·36	...	42·07	44·0	45·3
	25 to	31	49·73	45·36	44·05	42·36	45·9	49·7
April	1 to	7	49·49	45·36	44·71	43·96	46·0	51·0
	8 to	14	49·32	45·49	45·44	44·55	43·8	46·2
	15 to	21	49·13	45·68	45·66	44·62	45·3	49·6
	22 to	28	48·95	45·77	45·86	44·34	44·4	47·5
	29 to May	5	48·88	45·96	46·36	47·14	54·0	62·4
May	6 to	12	48·77	46·18	48·05	49·99	56·3	62·0
	13 to	19	48·64	46·53	49·33	51·78	56·6	61·3
	20 to	26	48·55	47·05	50·50	53·88	60·7	68·7
	27 to June	2	48·49	47·72	51·88	54·16	55·4	57·5
June	3 to	9	48·48	48·44	52·38	54·04	55·7	58·6
	10 to	16	48·47	48·98	52·85	54·51	57·8	61·7
	17 to	23	48·51	49·49	53·54	55·89	60·0	65·2
	24 to	30	48·58	49·91	54·35	57·42	59·5	62·3
July	1 to	7	48·69	50·42	55·00	57·83	62·1	67·8
	8 to	14	48·80	50·90	55·69	58·98	61·9	65·6
	15 to	21	48·94	51·42	56·52	60·04	62·7	64·6
	22 to	28	49·07	51·94	56·84	58·71	58·9	61·5
	29 to August	4	49·25	52·42	56·75	58·66	61·2	65·1
August	5 to	11	49·43	52·71	56·98	58·79	59·7	62·3
	12 to	18	49·61	53·01	57·05	58·90	60·7	63·7
	19 to	25	49·79	53·26	57·20	58·72	59·6	62·4
	26 to September	1	50·00	53·53	57·34	58·94	60·8	65·7
September	2 to	8	50·19	53·75	57·36	58·56	59·4	65·4
	9 to	15	50·35	53·91	57·15	57·58	56·6	63·1
	16 to	22	50·49	54·01	56·65	56·95	57·9	60·6
	23 to	29	50·63	54·00	56·32	55·72	53·7	55·8
	30 to October	6	50·83	54·01	55·58	54·51	54·1	58·7
October	7 to	13	50·91	53·75	54·91	53·39	48·4	49·4
	14 to	20	51·05	53·56	53·84	51·49	51·9	54·8
	21 to	27	51·18	53·31	53·31	51·94	54·6	58·8
	28 to November	3	51·27	52·97	53·42	52·68	50·5	54·9
November	4 to	10	51·29	52·71	52·66	49·07	44·0	44·3
	11 to	17	51·31	52·44	51·19	47·26	44·7	45·6
	18 to	24	51·33	51·97	50·08	45·68	42·4	43·8
	25 to December	1	51·35	51·38	49·00	45·02	43·7	44·6
December	2 to	8	51·35	50·81	48·56	45·87	46·6	47·6
	9 to	15	51·28	50·30	48·48	45·58	42·5	41·0
	16 to	22	51·15	49·84	47·70	42·97	35·9	33·5
	23 to	31	51·05	49·40	45·94	39·92	33·4	32·4

ABSTRACT OF THE CHANGES OF THE DIRECTION OF THE WIND, AS DERIVED FROM OSLER'S ANEMOMETER.

By *direct* motion, in the following statements, is meant that the change of the direction of the wind was in the order N., E., S., W., N., &c.; by *retrograde* is meant in the order N., W., S., E., N., &c.

1859. Dec. 31^{d}. 12^{h}. The direction of the wind was S.W.

1860. Jan. 31. 12. ,, ,, N.N.W., which implies a direct motion of $112\frac{1}{2}$°.

On Jan. 18. 3, the trace was shifted to the next set of lines upwards; on Jan. 18^{d}. 22^{h}, the trace was shifted to the next set of lines downwards, implying retrograde motion of 360°, and direct motion of 360°.

Therefore the whole excess of direct motion in the month of January was $112\frac{1}{2}$°.

1860. Jan. 31^{d}. 12^{h}. The direction of the wind was N.N.W.

Feb. 29. 12. ,, ,, S.W., which implies a retrograde motion of $112\frac{1}{2}$°.

On Feb. 11. 22, the trace was shifted to the next set of lines upwards; on Feb. 22^{d}. 22^{h}, the trace was shifted to the next set of lines downwards, implying retrograde motion of 360°, and direct motion of 360°.

Therefore the whole excess of retrograde motion in the month of February was $112\frac{1}{2}$°.

1860. Feb. 29^{d}. 12^{h}. The direction of the wind was S.W.

March 31. 12. ,, ,, W.S.W., which implies a direct motion of $22\frac{1}{2}$°.

On March 11. $0\frac{3}{4}$, 26^{d}. 22^{h}, 29^{d}. 22^{h}, the trace was shifted to the next set of lines downwards; on March 14^{d}. 22^{h}, the trace was shifted to the next set of lines upwards, implying direct motion of 1080°, and retrograde motion of 360°.

Therefore the whole excess of direct motion in the month of March was $742\frac{1}{2}$°.

1860. March 31^{d}. 12^{h}. The direction of the wind was W.S.W.

April 30. 12. ,, ,, E.N.E., which implies a retrograde motion of 180°.

On April 5. 22, 13^{d}. 22^{h}, 21^{d}. 22^{h}, 25^{d}. 22^{h}, the trace was shifted to the next set of lines upwards; on April 6^{d}. $1\frac{1}{2}^{h}$, 14^{d}. 22^{h}, 28^{d}. 22^{h}, the trace was shifted to the next set of lines downwards, implying retrograde motion of 1440°, and direct motion of 1080°.

Therefore the whole excess of retrograde motion in the month of April was 540°.

1860. April 30^{d}. 12^{h}. The direction of the wind was E.N.E.

May 31. 12. ,, ,, W.S.W., which implies a direct motion of 180°.

On May 4. 22, 20^{d}. 22^{h}, the trace was shifted to the next set of lines downwards, implying direct motion of 720°.

Therefore the whole excess of direct motion in the month of May was 900°.

1860. May 31^{d}. 12^{h}. The direction of the wind was W.S.W.

June 30. 12. ,, ,, N.N.E., which implies a direct motion of 135°.

On June 9. 22, 16^{d}. $2\frac{3}{4}^{h}$, the trace was shifted to the next set of lines upwards, implying retrograde motion of 720°.

Therefore the whole excess of retrograde motion in the month of June was 585°.

1860. June 30^{d}. 12^{h}. The direction of the wind was N.N.E.

July 31. 12. ,, ,, W., which implies a retrograde motion of $112\frac{1}{2}$°.

On July 17. 22, 21^{d}. 22^{h}, the trace was shifted to the next set of lines upwards, implying retrograde motion of 720°.

Therefore the whole excess of retrograde motion in the month of July was $832\frac{1}{2}$°.

1860. July 31^{d}. 12^{h}. The direction of the wind was W.

Aug. 31. 12. ,, ,, S.W., which implies a retrograde motion of 45°.

Therefore the whole excess of retrograde motion in the month of August was 45°.

1860. Aug. $\overset{d}{31}$. $\overset{h}{12}$. The direction of the wind was S.W.
Sept. 30. 12. ,, ,, N.W., which implies a direct motion of 90°.
On Sept. 12. 22, the trace was shifted to the next set of lines downwards; on Sept. 24^{d}. 22^{h}, 27^{d}. 22^{h}, the trace was shifted to the next set of lines upwards, implying direct motion of 360°, and retrograde motion of 720°.
Therefore the whole excess of retrograde motion in the month of September was 270°.

1860. Sept. $\overset{d}{30}$. $\overset{h}{12}$. The direction of the wind was N.W.
Oct. 31. 12. ,, ,, E.N.E., which implies a retrograde motion of $247\frac{1}{2}$°.
Therefore the whole excess of retrograde motion in the month of October was $247\frac{1}{2}$°.

1860. Oct. $\overset{d}{31}$. $\overset{h}{12}$. The direction of the wind was E.N.E.
Nov. 30. 12. ,, ,, S.W., which implies a direct motion of $517\frac{1}{2}$°.
On Nov. 7. 22, 13^{d}. 22^{h}, 23^{d}. 22^{h}, the trace was shifted to the next set of lines upwards; on Nov. 12^{d}. 22^{h}, the trace was shifted to the next set of lines downwards, implying retrograde motion of 1080°, and direct motion of 360°.
Therefore the whole excess of retrograde motion in the month of November was $202\frac{1}{2}$°.

1860. Nov. $\overset{d}{30}$. $\overset{h}{12}$. The direction of the wind was S.W.
Dec. 31. 12. ,, ,, S., which implies a retrograde motion of 45°.
On Dec. 0. 22, 29^{d}. 22^{h}, the trace was shifted to the next set of lines downwards; on Dec. 20^{d}. 22^{h}, the trace was shifted to the next set of lines upwards, implying direct motion of 720°, and retrograde motion of 360°.
Therefore the whole excess of direct motion in the month of December was 315°.

The whole excess of retrograde motion to the end of the year was 765°

The revolution-counter which is attached to the vertical spindle of the vane, whose readings increase with change of direction of the wind in the order N., E., S., W., &c., or in direct motion, and decrease with change of direction in the order N., W., S., E., &c. or in retrograde motion, gave the following readings:—

	revs.
On 1860, January 1	42·0
December 31	39·9

Implying an excess of retrograde motion, during the year, of 2·1 revolutions, or 756°.

AMOUNT OF RAIN COLLECTED IN EACH MONTH OF THE YEAR 1860.

1860. MONTH.	Monthly Amount of Rain collected in each Gauge.			
	Osler's Anemometer Gauge.	On the Roof of the Library.	Crosley's.	Cylinder partly sunk in the Ground.
	in.	in.	in.	in.
January - -	1 ·0	1 ·1	1 ·6	1 ·8
February - -	0 ·5	0 ·7	1 ·0	1 ·1
March - -	0 ·8	1 ·1	1 ·7	1 ·9
April - -	0 ·5	0 ·8	1 ·0	1 ·0
May - - -	2 ·1	3 ·4	3 ·6	3 ·9
June - - -	3 ·0	5 ·2	5 ·3	5 ·8
July - - -	2 ·3	2 ·6	2 ·6	2 ·8
August - -	1 ·9	2 ·7	3 ·5	3 ·7
September - -	1 ·9	2 ·8	2 ·2	3 ·1
October - -	0 ·8	1 ·0	1 ·0	1 ·6
November - -	1 ·6	2 ·2	1 ·8	2 ·5
December - -	1 ·5	1 ·9	2 ·1	2 ·8
Sums - -	17 ·9	25 ·5	27 ·4	32 ·0

The heights of the receiving surfaces are as follows:

	Above the Mean Level of the Sea.			Above the Ground.	
	Ft.	In.		Ft.	In.
Osler's Anemometer Gauge	205	6	....	50	8
Gauge on the Roof of the Library	177	2	....	22	4
Crosley's Gauge	156	6	....	1	8
Cylinder Gauge	155	3	....	0	5

During the last four months of the year, Crosley's Gauge evidently did not register correctly; the amounts are probably in erro by about $0^{\mathrm{in}}{\cdot}3$.

ROYAL OBSERVATORY, GREENWICH.

SUPPLEMENTARY APPENDIX

TO

RESULTS

OF

METEOROLOGICAL OBSERVATIONS, 1860:

CONTAINING

I.—Monthly Means of Results for Atmospheric Pressure, Temperature, Moisture, and Rain, from 1848 to 1853.

II.—Monthly Statement of the Number of Days of Wind referred to Eight Points of the Azimuthal Circle, and of the Number of Calm Days, from 1841 to 1860.

III.—Monthly Statement of the Mean Daily Horizontal Movement of the Air in Miles, as found by converting the observed Indications of Whewell's Anemometer into corresponding Indications of Robinson's Anemometer, from 1843 to 1859.

IV.—Weekly and Monthly Means of the Readings of the Deep-sunk Thermometers, from 1848 to 1855.

I.—MONTHLY MEANS OF RESULTS FOR ATMOSPHERIC PRESSURE, TEMPERATURE, MOISTURE, AND RAIN, FROM 1848 TO 1853.

In the printed *Meteorological Observations* from their commencement in 1840 to 1847, the Monthly and Yearly Means of the principal Meteorological Results were published; and again in the printed *Results of Meteorological Observations* from 1854 to the present year, the same Means were published. The publication was omitted in the years 1848 to 1853.

The following Tables contain the Means of the principal Meteorological Results from 1848 to 1853.

MONTHLY MEANS of RESULTS, in the YEAR 1848.

1848. MONTH.	Mean Reading of the Baro-meter.	TEMPERATURE OF THE AIR.							Mean Temper-ature of Dew Point.	HYGROMETRICAL DEDUCTIONS, from Glaisher's Tables, 2nd Edition.					RAIN.	
		High-est.	Low-est.	Range in the Month.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily Range.	Mean Temper-ature.		Mean Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean additional Weight required to saturate a Cubic Foot of Air.	Mean Degree of Humidity. (Sat.=100)	Mean Weight of a Cubic Foot of Air.	Number of Rainy Days.	Amount collected on the Ground
	in	°	°	°	°	°	°	°	°	in.	grs.	grs.		grs.		in.
January........	29·816	50·4	15·8	34·6	38·1	29·8	8·3	34·6	29·3	0·162	1·9	0·4	80	559	8	1·2
February.......	29·517	55·0	29·2	25·8	48·7	38·0	10·7	43·4	39·4	0·241	2·8	0·5	85	544	19	2·6
March	29·505	71·5	27·3	44·2	50·7	36·4	14·3	43·8	39·0	0·238	2·7	0·5	82	543	22	3·1
April..........	29·589	75·0	29·7	45·3	56·2	39·5	16·7	47·6	41·1	0·258	3·0	0·7	79	540	23	3·4
May............	29·926	83·0	33·5	49·5	74·4	43·9	30·5	59·7	47·1	0·324	3·6	2·1	63	533	5	0·4
June	29·642	78·4	38·7	39·7	68·0	50·5	17·5	58·5	50·7	0·370	4·2	1·3	76	529	22	3·5
July	29·836	85·3	42·2	43·1	73·7	51·2	22·5	62·3	53·6	0·412	4·6	1·7	74	528	18	2·0
August	29·723	75·5	42·5	33·0	68·9	50·4	18·5	58·9	51·9	0·386	4·3	1·3	78	530	29	4·3
September......	29·832	78·8	32·8	46·0	66·8	45·9	20·9	56·7	50·0	0·361	4·0	1·1	78	534	14	2·4
October........	29·646	74·0	32·4	41·6	59·6	43·1	16·5	51·6	47·0	0·323	3·6	0·7	84	537	26	3·5
November	29·785	57·8	25·2	32·6	51·1	35·4	15·7	43·8	39·2	0·239	2·8	0·5	84	548	19	1·2
December	29·807	62·8	21·8	41·0	48·9	36·2	12·7	44·0	40·2	0·249	2·8	0·4	86	548	18	2·6
Means	29·719	70·6	30·9	39·7	58·8	41·7	17·1	50·4	44·0	0·297	3·4	0·9	79	539	Sum. 223	Sum. 30·2

MONTHLY MEANS of RESULTS, in the YEAR 1849.

1849. MONTH.	Mean Reading of the Baro-meter.	TEMPERATURE OF THE AIR.							Mean Temper-ature of Dew Point.	HYGROMETRICAL DEDUCTIONS, from Glaisher's Tables, 2nd Edition.					RAIN.	
		High-est.	Low-est.	Range in the Month.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily Range.	Mean Temper-ature.		Mean Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean additional Weight required to saturate a Cubic Foot of Air.	Mean Degree of Humidity. (Sat.=100)	Mean Weight of a Cubic Foot of Air.	Number of Rainy Days.	Amount collected on the Ground.
	in.	°	°	°	°	°	°	°	°	in.	grs.	grs.		grs.		in.
January........	29·771	56·4	19·9	36·5	45·4	34·7	10·7	40·1	36·7	0·218	2·5	0·4	88	552	17	1·6
February.......	30·106	58·0	26·8	31·2	49·4	36·5	12·9	43·2	39·3	0·240	2·8	0·5	85	555	19	2·2
March	29·915	60·7	27·7	33·0	50·1	36·3	13·8	42·5	36·5	0·216	2·3	0·6	80	552	11	0·5
April..........	29·517	64·3	28·6	35·7	52·5	36·5	16·0	43·3	39·4	0·241	2·8	0·4	86	544	20	2·2
May............	29·766	75·0	36·8	38·2	63·8	46·7	17·1	54·2	43·9	0·287	3·3	1·4	68	536	15	3·9
June	29·868	80·7	38·6	42·1	69·1	48·5	20·6	58·4	49·5	0·355	3·9	1·5	73	534	7	0·2
July	29·789	84·1	39·5	44·6	74·2	51·6	22·6	62·1	51·1	0·375	4·1	2·1	67	528	12	2·9
August	29·841	82·5	42·4	40·1	74·2	54·0	20·2	62·9	52·6	0·397	4·4	2·0	69	528	8	0·5
September......	29·767	79·0	42·7	36·3	68·7	51·2	17·5	58·8	50·8	0·371	4·2	1·3	75	531	15	3·3
October........	29·744	69·7	31·5	38·2	59·2	44·1	15·1	51·1	45·2	0·302	3·4	0·8	81	539	21	2·7
November	29·743	61·7	23·5	38·2	49·8	38·1	11·7	44·1	39·9	0·246	2·8	0·5	85	547	11	1·5
December	29·795	56·3	18·8	35·9	43·2	34·1	9·1	39·1	36·4	0·215	2·5	0·3	90	554	18	2·4
Means	29·802	69·0	31·4	37·5	58·3	42·7	15·6	50·0	43·4	0·289	3·3	1·0	79	542	Sum. 174	Sum. 23·9

Monthly Means of Results, in the Year 1850.

1850. MONTH.	Mean Reading of the Barometer.	Temperature of the Air.							Mean Temperature of Dew Point.	Hygrometrical Deductions, from Glaisher's Tables, 2nd Edition.					Rain.	
		Highest.	Lowest.	Range in the Month.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily Range.	Mean Temperature.		Mean Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean additional Weight required to saturate a Cubic Foot of Air.	Mean Degree of Humidity. (Sat. = 100)	Mean Weight of a Cubic Foot of Air.	Number of Rainy Days.	Amount collected on the Ground.
	in.	°	°	°	°	°	°	°	°	in.	grs.	grs.		grs.		in.
January	29·854	53·1	22·0	31·1	38·0	29·5	8·5	33·7	30·4	0·170	2·0	0·3	87	561	10	1·2
February	29·828	58·2	30·0	28·2	50·7	39·1	11·6	44·7	39·5	0·242	2·8	0·6	82	548	13	1·3
March	30·039	58·0	20·0	38·0	48·6	32·1	16·5	39·9	33·2	0·189	2·2	0·7	77	557	5	0·3
April	29·594	66·9	34·0	32·9	58·5	42·5	16·0	48·5	42·0	0·267	3·0	0·8	79	540	18	2·3
May	29·714	76·5	31·7	44·8	62·1	43·2	18·9	51·3	43·5	0·283	3·2	1·0	76	539	21	2·4
June	29·886	85·1	36·2	48·9	74·1	48·1	26·0	60·8	49·6	0·356	3·9	2·0	66	531	8	0·9
July	29·789	87·0	43·5	43·5	72·9	52·9	20·0	62·2	55·1	0·434	4·8	1·4	78	528	15	2·9
August	29·787	81·0	40·0	41·0	70·6	52·0	18·6	60·2	53·5	0·410	4·6	1·2	78	530	14	1·9
September	29·930	70·5	39·0	31·5	65·3	48·2	17·1	56·4	49·7	0·357	4·0	1·0	78	537	13	1·3
October	29·681	64·5	31·5	33·0	54·8	40·6	14·2	47·0	41·4	0·261	3·0	0·7	81	543	8	1·4
November	29·728	61·3	27·9	33·4	52·4	41·0	11·4	46·5	42·2	0·269	3·1	0·5	86	544	14	2·5
December	29·914	56·5	24·2	32·3	44·8	36·1	8·7	40·6	38·4	0·232	2·7	0·2	92	554	16	1·3
Means	29·812	68·2	31·7	36·5	57·7	42·1	15·6	49·3	43·2	0·289	3·3	0·9	80	543	Sum. 155	Sum. 19·7

Monthly Means of Results, in the Year 1851.

1851. MONTH.	Mean Reading of the Barometer.	Temperature of the Air.							Mean Temperature of Dew Point.	Hygrometrical Deductions, from Glaisher's Tables, 2nd Edition.					Rain.	
		Highest.	Lowest.	Range in the Month.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily Range.	Mean Temperature.		Mean Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean additional Weight required to saturate a Cubic Foot of Air.	Mean Degree of Humidity. (Sat. = 100)	Mean Weight of a Cubic Foot of Air.	Number of Rainy Days.	Amount collected on the Ground.
	in	°	°	°	°	°	°	°	°	in.	grs.	grs.		grs.		in.
January	29·649	56·5	26·6	29·9	48·1	38·1	10·0	42·9	38·5	0·233	2·7	0·5	85	546	15	2·7
February	29·891	57·1	23·7	33·4	47·4	34·2	13·2	40·1	36·0	0·212	2·4	0·5	86	554	14	1·2
March	29·600	58·4	29·8	28·6	49·5	37·4	12·1	42·6	37·5	0·225	2·6	0·6	83	546	21	4·1
April	29·726	64·1	28·6	35·5	54·1	38·0	16·1	44·7	39·3	0·240	2·8	0·6	81	546	11	2·3
May	29·891	74·2	33·5	40·7	61·4	41·8	19·6	50·9	43·1	0·278	3·2	1·0	75	542	12	0·8
June	29·895	87·0	38·5	48·5	70·8	48·7	22·1	58·9	49·6	0·356	4·0	1·6	71	533	12	1·3
July	29·708	84·4	38·9	45·5	71·1	51·0	20·1	60·1	51·8	0·385	4·3	1·5	74	529	17	4·3
August	29·890	82·0	42·2	39·8	73·4	53·4	20·0	62·3	53·2	0·406	4·5	1·8	73	529	9	1·5
September	30·025	76·6	37·6	39·0	67·9	47·3	20·6	56·9	48·1	0·336	3·8	1·4	72	538	14	0·4
October	29·726	70·1	34·7	35·4	59·7	46·7	13·0	52·6	46·4	0·316	3·5	0·9	80	537	14	1·8
November	29·781	53·4	24·3	29·1	44·3	32·4	11·9	37·9	32·5	0·184	2·1	0·6	81	555	10	0·6
December	30·135	54·8	24·9	29·9	44·4	36·4	8·0	40·4	36·1	0·213	2·5	0·5	85	558	6	0·6
Means	29·826	68·2	31·9	36·3	57·7	42·1	15·6	49·2	42·7	0·282	3·2	1·0	79	543	Sum. 155	Sum. 21·6

MONTHLY MEANS OF RESULTS, IN THE YEAR 1852.

1852. MONTH.	Mean Reading of the Barometer.	Temperature of the Air. Highest.	Lowest.	Range in the Month.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily Range.	Mean Temperature.	Mean Temperature of the Dew Point.	Hygrometrical Deductions, from Glaisher's Tables, 2nd Edition. Mean Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean additional Weight required to saturate a Cubic Foot of Air.	Mean Degree of Humidity. (Sat. = 100)	Mean Weight of a Cubic Foot of Air.	Rain. Number of Rainy Days.	Amount collected on the Ground.
January	29·557	55·5	28·1	27·4	47·9	36·5	11·4	42·0	35·7	0·209	2·4	0·7	77	546	19	3·6
February	29·857	57·4	24·9	32·5	47·5	35·3	12·2	40·8	35·1	0·204	2·4	0·6	81	553	12	0·9
March	30·007	68·4	21·3	47·1	50·7	32·1	18·6	41·3	34·3	0·198	2·3	0·7	77	555	5	0·2
April	29·945	74·7	26·7	48·0	58·2	34·2	24·0	45·9	38·2	0·231	2·7	0·9	74	549	6	0·5
May	29·786	73·4	29·3	44·1	61·8	43·2	18·6	51·5	44·0	0·288	3·2	1·1	76	540	14	1·9
June	29·560	72·7	41·0	31·7	66·5	49·4	17·1	56·1	48·1	0·336	3·8	1·2	75	530	23	4·6
July	29·857	90·3	49·2	41·1	80·6	55·7	24·9	66·6	55·9	0·447	5·0	2·2	68	524	4	2·3
August	29·649	81·5	49·9	31·6	72·6	54·7	17·9	62·1	51·8	0·385	4·3	2·0	70	526	16	4·4
September	29·739	77·5	37·9	39·6	66·6	49·2	17·4	56·8	48·9	0·346	3·9	1·2	75	533	13	3·8
October	29·687	64·0	31·0	33·0	55·7	41·1	14·6	47·9	41·8	0·265	3·0	0·8	81	542	17	3·8
November	29·465	63·8	32·6	31·2	54·5	44·1	10·4	48·9	43·5	0·283	3·2	0·7	82	536	23	6·0
December	29·581	57·1	31·7	25·4	52·1	42·4	9·7	47·6	41·1	0·258	2·9	0·8	78	540	19	2·2
Means	29·727	69·7	33·6	36·1	59·6	43·2	16·4	50·6	43·2	0·287	3·3	1·1	76	540	Sum. 171	Sum. 34·2

MONTHLY MEANS OF RESULTS, IN THE YEAR 1853.

1853. MONTH.	Mean Reading of the Barometer.	Temperature of the Air. Highest.	Lowest.	Range in the Month.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily Range.	Mean Temperature.	Mean Temperature of Dew Point.	Hygrometrical Deductions, from Glaisher's Tables, 2nd Edition. Mean Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean additional Weight required to saturate a Cubic Foot of Air.	Mean Degree of Humidity. (Sat. = 100)	Mean Weight of a Cubic Foot of Air	Rain. Number of Rainy Days.	Amount collected on the Ground.
January	29·570	55·5	30·8	24·7	47·6	37·5	10·1	42·4	36·6	0·217	2·5	0·6	80	546	20	2·0
February	29·525	45·0	20·5	24·5	39·1	29·0	10·1	33·3	26·6	0·145	1·7	0·6	76	556	13	0·9
March	29·780	60·5	20·8	39·7	47·0	31·2	15·8	38·5	32·1	0·182	2·1	0·6	78	554	13	1·5
April	29·710	62·0	32·3	29·7	54·0	39·8	14·2	45·2	38·3	0·231	2·7	0·7	77	545	14	2·1
May	29·754	78·8	32·6	46·2	63·1	42·6	20·5	52·0	43·5	0·283	3·2	1·2	73	539	11	1·6
June	29·729	81·0	39·9	41·1	68·9	50·2	18·7	58·2	47·5	0·330	3·8	1·7	68	531	13	2·8
July	29·728	81·7	48·3	33·4	70·5	53·4	17·1	60·3	51·9	0·386	4·3	1·6	74	529	15	6·0
August	29·793	77·5	45·8	31·7	70·9	51·8	19·1	60·0	52·1	0·389	4·3	1·5	75	530	7	2·2
September	29·833	73·0	37·5	35·5	65·2	47·2	18·0	55·3	50·1	0·364	4·0	0·9	84	536	12	2·4
October	29·553	67·0	31·7	35·3	59·1	43·9	15·2	50·9	47·8	0·333	3·7	0·4	89	536	24	4·3
November	29·941	60·8	25·8	35·0	47·8	36·3	11·5	42·1	40·3	0·250	2·9	0·3	93	553	11	1·5
December	29·804	50·8	18·0	32·8	38·8	29·5	9·3	34·0	31·2	0·175	2·1	0·2	89	559	8	0·7
Means	29·727	66·1	32·0	34·1	56·0	41·0	15·0	47·7	41·5	0·274	3·1	0·9	80	543	Sum. 162	Sum. 29·0

II.—MONTHLY STATEMENT OF THE NUMBER OF DAYS OF WIND REFERRED TO EIGHT POINTS OF THE AZIMUTHAL CIRCLE, AND OF THE NUMBER OF CALM DAYS, FROM 1841 TO 1860.

The frequent references, which have been made to the difference in the proportion of Winds in different directions at different Seasons of the Year, have suggested the exhibition of this Table for past years. It is proposed to continue it in future years.

NUMBER of DAYS of WIND during each Month in every Year from 1841 to 1860, referred to Eight Points of the Azimuthal Circle, and of CALM DAYS, as deduced from Osler's Anemometer.

MONTH.	Number of Days for different Mean Directions of the Wind.								Number of Calm Days, i.e. Days on which the Pressure of the Wind was less than ¼ lb. per Square Foot.
	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	
1841.									
January	5	3	2	1	5	5	7	2	1
February	1	6	7	1	6	2	1	2	2
March	0	0	1	1	7	12	7	2	1
April	7	4	2	2	1	6	7	1	0
May	2	4	4	1	6	12	1	1	0
June	6	0	0	0	4	9	9	2	0
July	5	0	0	0	4	15	3	2	2
August	1	0	0	0	3	15	6	1	5
September	0	1	3	2	3	7	4	0	10
October	7	1	0	1	3	9	5	1	4
November	5	0	3	0	4	11	2	1	4
December	1	0	0	0	3	9	8	2	8
Sums	40	19	22	9	49	112	60	17	37
1842.									
January	6	2	0	3	2	11	1	3	3
February	1	0	3	1	4	14	1	1	3
March	4	0	0	1	3	14	6	3	0
April	1	17	10	0	0	1	0	1	0
May	3	5	0	2	5	11	2	2	1
June	2	6	4	1	2	9	3	2	1
July	6	2	2	0	5	9	4	3	0
August	2	5	6	3	3	6	4	2	0
September	5	2	3	1	2	6	6	3	2
October	10	0	0	0	1	5	5	3	7
November	5	1	3	2	1	9	2	2	5
December	1	0	0	1	3	17	4	0	5
Sums	46	40	31	15	31	112	38	25	27
1843.									
January	2	1	0	0	1	10	9	1	7
February	6	8	6	1	0	2	1	3	1
March	6	6	2	2	3	4	3	1	4
April	2	4	3	0	0	12	2	3	4
May	3	6	4	1	0	10	2	0	5
June	8	4	4	0	2	6	2	3	1
July	5	3	0	0	2	12	5	2	2
August	3	6	1	1	4	10	3	1	2
September	4	6	2	2	1	4	0	4	7
October	3	0	0	1	2	10	6	4	5
November	0	0	0	0	2	12	1	4	11
December	0	0	0	0	1	10	3	3	14
Sums	42	44	22	8	18	102	37	29	63

NUMBER of DAYS of WIND during each Month in every Year from 1841 to 1860, referred to Eight Points of the Azimuthal Circle, and of CALM DAYS, as deduced from Osler's Anemometer—*continued.*

MONTH.	Number of Days for different Mean Directions of the Wind.								Number of Calm Days and Days on which **the Pressure of the** Wind was less **that ¼ lb. per Square Foot.**
	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	
1844.									
January	2	2	0	1	3	8	6	5	4
February	4	0	1	0	3	10	3	3	5
March	6	3	2	0	1	10	4	3	2
April	4	4	2	2	2	12	2	1	1
May	10	14	3	2	0	1	0	1	0
June	3	3	1	1	0	7	3	5	7
July	3	5	0	0	2	7	4	4	6
August	1	0	0	1	1	11	6	2	9
September	6	8	0	0	0	2	1	0	13
October	3	2	2	1	5	11	4	0	3
November	3	5	1	2	4	10	2	2	1
December	3	11	6	4	1	0	0	0	6
Sums	48	57	18	14	22	89	35	26	57
1845.									
January	2	2	0	3	8	10	0	4	2
February	4	3	1	0	5	3	2	5	5
March	5	10	1	3	1	5	2	4	0
April	4	7	1	1	4	7	0	3	3
May	8	6	1	0	2	3	4	3	4
June	1	6	1	2	1	11	3	2	3
July	2	4	2	0	3	14	3	2	1
August	2	2	1	0	3	12	7	4	0
September	2	7	2	1	1	10	3	1	3
October	0	1	0	0	5	9	6	5	5
November	0	1	1	3	7	7	5	0	6
December	0	0	0	0	3	13	8	5	2
Sums	30	49	11	13	43	104	43	38	34
1846.									
January	0	0	1	0	3	11	5	1	10
February	0	0	0	1	3	8	4	4	8
March	0	0	1	2	2	12	2	3	9
April	5	4	4	2	3	7	3	2	0
May	2	4	2	3	3	7	5	1	4
June	1	4	4	5	1	9	1	1	4
July	1	1	0	1	1	12	6	1	8
August	6	5	0	1	4	6	0	2	7
September	4	3	4	1	4	3	1	1	9
October	2	0	0	2	4	7	3	1	12
November	1	3	5	0	7	6	0	2	6
December	5	1	0	0	4	6	2	4	9
Sums	27	25	21	18	39	94	32	23	86

Number of Days of Wind during each Month in every Year from 1841 to 1860, referred to Eight Points of the Azimuthal Circle, and of Calm Days, as deduced from Osler's Anemometer—*continued.*

MONTH.	Number of Days for different Mean Directions of the Wind.								Number [illegible] than ¼ lb. [illegible]
	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	
1847.									
January	2	2	3	1	2	3	1	0	17
February	2	4	3	0	3	8	4	0	4
March	4	5	2	0	6	6	2	2	4
April	4	1	0	1	6	10	2	5	1
May	1	0	2	1	12	10	1	0	4
June	7	2	1	0	3	9	4	2	2
July	7	2	1	0	2	8	4	0	7
August	5	1	2	0	2	11	3	0	7
September	2	3	0	0	0	16	6	0	3
October	4	1	2	0	6	10	3	0	5
November	1	0	0	0	5	11	5	1	7
December	2	2	0	1	8	9	1	0	8
Sums	41	23	16	4	55	111	36	10	69
1848.									
January	7	6	2	5	5	3	2	1	0
February	2	0	0	0	3	17	6	0	1
March	5	0	2	6	4	8	2	3	1
April	8	6	1	3	4	3	2	3	0
May	3	5	8	4	1	4	1	0	5
June	3	4	1	1	4	10	4	2	1
July	3	4	1	0	10	6	5	1	1
August	1	2	0	2	6	10	3	0	7
September	6	6	0	2	4	5	0	2	5
October	6	2	0	5	10	5	0	3	0
November	7	0	0	4	1	12	3	3	0
December	2	3	4	4	6	7	1	2	2
Sums	53	38	19	36	58	90	29	20	23
1849.									
January	3	5	0	1	5	14	1	2	0
February	2	0	1	1	4	14	4	0	2
March	7	1	4	2	1	4	4	4	4
April	6	4	1	2	4	6	5	2	0
May	8	5	0	2	5	6	1	2	2
June	6	5	5	1	1	6	4	1	1
July	2	7	0	0	3	13	3	3	0
August	5	3	0	3	3	9	5	3	0
September	5	9	3	1	4	7	0	0	1
October	4	7	0	3	3	10	3	0	1
November	3	6	2	4	4	7	2	2	0
December	8	2	4	3	2	6	3	3	0
Sums	59	54	20	23	39	102	35	22	11

NUMBER of DAYS of WIND during each Month in every Year from 1841 to 1860, referred to Eight Points of the Azimuthal Circle, and of CALM DAYS, as deduced from Osler's Anemometer—*continued.*

MONTH.	Number of Days for different Mean Directions of the Wind.								Number of Calm Days and Days on which the Pressure of the Wind was less than ½ lb. per Square Foot.
	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	
1850.									
January	7	6	3	2	4	6	3	0	0
February	0	0	1	1	3	14	7	0	2
March	9	4	2	3	1	5	1	1	5
April	5	5	1	3	4	8	1	0	3
May	5	8	2	2	1	7	2	1	3
June	1	4	7	1	2	9	5	1	0
July	5	4	1	1	2	6	2	3	7
August	3	2	1	0	2	12	1	2	8
September	5	10	3	2	2	4	1	2	1
October	5	2	0	0	1	15	2	5	1
November	2	3	0	2	2	17	1	3	0
December	2	0	3	4	6	13	1	1	1
Sums	49	48	24	21	30	116	27	19	31
1851.									
January	0	0	1	6	5	17	0	0	2
February	5	3	2	1	3	7	1	0	6
March	5	2	0	3	2	13	2	3	1
April	6	5	4	3	2	8	2	0	0
May	7	3	1	2	3	4	1	5	5
June	2	2	4	0	2	10	5	4	1
July	5	3	2	0	2	7	5	2	5
August	3	7	1	0	2	9	5	2	2
September	5	9	4	2	1	2	1	1	5
October	1	1	1	1	4	13	6	2	2
November	10	2	0	0	1	3	5	5	4
December	3	2	1	2	1	7	4	1	10
Sums	52	39	21	20	28	100	37	25	43
1852.									
January	0	1	0	0	9	14	7	0	0
February	7	5	1	2	0	5	6	2	1
March	4	9	9	3	2	1	2	0	1
April	1	10	12	1	1	4	0	0	1
May	7	9	1	0	3	9	2	0	0
June	2	0	1	5	8	13	1	0	0
July	5	8	5	2	3	8	0	0	0
August	6	1	0	2	8	12	0	2	0
September	6	4	4	1	1	5	4	1	4
October	4	5	0	2	4	10	3	3	0
November	2	6	2	1	9	8	1	0	1
December	1	0	1	2	4	19	1	0	3
Sums	45	58	36	21	52	108	27	8	11

NUMBER of DAYS of WIND during each Month in every Year from 1841 to 1860, referred to Eight Points of the Azimuthal Circle, and of CALM DAYS, as deduced from Osler's Anemometer—*continued.*

MONTH.	Number of Days for different Mean Directions of the Wind.								Number of Calm Days and Days on which the Pressure of the Wind was less than ½ lb. per Square Foot.
	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	
1853.									
January	3	4	0	0	7	12	2	1	2
February	8	6	1	3	1	2	1	1	5
March	1	10	2	2	1	6	2	2	5
April	3	4	2	1	1	4	6	6	3
May	1	13	4	4	0	2	2	2	3
June	7	2	0	2	1	13	1	1	3
July	0	2	1	1	2	18	4	3	0
August	5	5	3	1	3	9	2	0	3
September	4	5	0	4	2	8	3	2	2
October	1	4	1	2	6	8	3	0	6
November	4	2	1	4	4	4	3	3	5
December	6	8	1	3	0	0	3	6	4
Sums	43	65	16	27	28	86	32	27	41
1854.									
January	2	3	1	9	5	8	1	2	0
February	2	2	1	0	3	11	1	7	1
March	3	4	0	1	4	11	2	3	3
April	4	7	8	1	0	3	4	3	0
May	2	5	0	0	4	17	1	0	2
June	3	5	1	2	3	10	5	1	0
July	2	5	2	1	3	8	4	0	6
August	3	2	0	1	0	14	2	3	6
September	1	5	1	0	2	6	4	2	9
October	1	4	3	2	2	5	5	3	6
November	7	3	0	3	3	11	1	2	0
December	1	0	0	0	1	13	12	4	0
Sums	31	45	17	20	30	117	42	30	33
1855.									
January	5	10	1	0	0	7	2	2	4
February	5	12	3	1	1	3	0	0	3
March	5	6	5	3	6	3	2	0	1
April	7	9	2	2	1	2	5	1	1
May	8	7	2	3	1	6	0	3	1
June	4	4	1	1	2	12	0	2	4
July	3	3	3	0	2	12	3	1	4
August	2	0	0	2	2	10	5	4	6
September	3	11	1	3	2	5	2	1	2
October	4	2	1	0	2	9	5	7	1
November	7	8	0	2	4	3	2	2	2
December	3	2	4	0	2	12	4	3	1
Sums	56	74	23	17	25	84	30	26	30

NUMBER of DAYS of WIND during each Month in every Year from 1841 to 1860, referred to Eight Points of the Azimuthal Circle, and of CALM DAYS, as deduced from Osler's Anemometer—*continued.*

MONTH.	Number of Days for different Mean Directions of the Wind.								Number of Calm Days and Days on which the Pressure of the Wind was less than ½ lb. per Square Foot.
	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	
1856.									
January	0	7	1	4	6	7	4	0	2
February	2	5	2	2	6	7	4	1	0
March	4	12	10	3	0	0	0	1	1
April	1	6	2	6	6	6	0	2	1
May	10	3	0	2	4	9	1	2	0
June	2	3	0	0	0	11	9	4	1
July	1	2	1	2	1	8	11	4	1
August	3	3	3	4	3	8	5	0	2
September	4	2	3	3	1	7	4	2	4
October	2	6	4	4	1	4	3	0	7
November	9	2	1	0	1	2	3	9	3
December	6	3	0	0	2	11	6	1	2
Sums	44	54	27	30	31	80	50	26	24
1857.									
January	7	6	0	0	3	8	6	1	0
February	0	4	0	2	4	12	1	2	3
March	1	2	4	6	3	7	2	4	2
April	1	5	2	3	4	8	2	4	1
May	1	13	5	1	1	8	2	0	0
June	0	4	7	2	3	8	2	2	2
July	0	4	0	0	1	16	5	5	0
August	2	7	2	2	1	10	3	1	3
September	1	4	0	2	5	12	2	1	3
October	3	1	2	5	3	9	4	0	4
November	5	8	6	3	2	2	0	0	4
December	0	0	0	1	3	19	5	1	2
Sums	21	58	28	27	33	119	34	21	24
1858.									
January	3	2	1	2	4	11	6	1	1
February	1	7	8	7	1	3	0	1	0
March	1	4	3	1	1	6	6	5	4
April	4	7	7	3	1	4	3	1	0
May	4	5	1	0	1	14	5	1	0
June	1	5	1	1	3	13	3	3	0
July	4	2	0	2	3	9	4	7	0
August	3	6	3	2	3	7	3	4	0
September	1	5	2	3	2	13	1	2	1
October	1	7	4	1	1	10	5	2	0
November	2	10	6	2	1	5	0	0	4
December	1	1	2	3	5	11	4	2	2
Sums	26	61	38	27	26	106	40	29	12

NUMBER of DAYS of WIND during each Month in every Year from 1841 to 1860, referred to Eight Points of the Azimuthal Circle, and of CALM DAYS, as deduced from Osler's Anemometer—*concluded.*

MONTH.	Number of Days for different Mean Directions of the Wind.								Number of Calm Days and Days on which the Pressure of the Wind was less than ½ lb. per Square Foot.
	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	
1859.									
January	2	3	0	0	0	18	5	2	1
February	1	0	0	1	3	14	5	4	0
March	2	0	0	0	2	15	6	6	0
April	4	2	2	3	3	11	1	4	0
May	1	23	4	2	1	0	0	0	0
June	4	7	0	6	0	4	4	4	1
July	3	6	1	1	2	13	3	1	1
August	2	3	0	1	4	11	5	4	1
September	4	1	1	1	2	13	3	4	1
October	1	2	3	4	3	9	4	1	4
November	3	3	2	6	4	9	2	0	1
December	4	4	3	4	1	11	2	1	1
Sums	31	54	16	29	25	128	40	31	11
1860.									
January	2	0	1	4	5	12	4	3	0
February	6	7	1	0	3	4	5	3	0
March	2	3	0	0	1	11	8	6	0
April	3	10	3	2	1	3	4	4	0
May	0	2	5	2	1	11	7	2	1
June	2	1	0	2	1	19	5	0	0
July	6	7	1	0	0	10	1	5	1
August	1	0	0	0	2	17	9	2	0
September	4	4	1	2	1	10	5	1	2
October	0	2	0	2	2	14	10	1	0
November	0	8	8	2	2	5	1	2	2
December	4	3	6	3	3	4	5	2	1
Sums	30	47	26	19	22	120	64	31	7

III.—MONTHLY STATEMENT OF THE MEAN DAILY HORIZONTAL MOVEMENT OF THE AIR IN MILES, AS FOUND BY CONVERTING THE OBSERVED INDICATIONS OF WHEWELL'S ANEMOMETER INTO CORRESPONDING INDICATIONS OF ROBINSON'S ANEMOMETER, FROM 1843 TO 1859.

During the years 1843 to 1859 Whewell's anemometer was in use, and during the Years 1860 and 1861 both Whewell's and Robinson's were in operation. The daily comparison of their results in the two last years showed clearly, that in strong winds the horizontal movement of the air, as shown by Whewell's anemometer, was less than one-half of that shown by Robinson's anemometer, and in light winds the difference between the two was very much greater.

From experiments made in the year 1861, the scale of velocity as indicated by Robinson's was found to be correct, and in accordance with the theory of the inventor.

The ratio of the scale of velocity as shown by Whewell's anemometer to that of Robinson's anemometer, was found to be so systematic, that every result given by the former would be readily convertible into that which would have been given by the latter, when the two instruments had been in simultaneous operation a sufficient length of time to determine satisfactorily the ratio existing between them for different velocities of the wind. For obtaining this ratio all the simultaneous results have been classified, and their discussion has led to the formation of the following Table of Factors.

TABLE OF FACTORS to be multiplied into the READINGS of WHEWELL'S ANEMOMETER expressed in MILES at different VELOCITIES of the WIND, in order to determine the HORIZONTAL MOVEMENT of the AIR in MILES, as it would have been shown by the USE of ROBINSON'S ANEMOMETER.

Daily Horizontal Movement in Miles, as shown by Whewell's Anemometer.	Factors to be multiplied into Results by Whewell's Anemometer, to convert them into Results by Robinson's Anemometer.
Less than 10	9·95
From 10 to 20	7·62
20 to 30	5·38
30 to 40	4·10
40 to 50	3·40
50 to 60	3·00
60 to 70	2·75
70 to 80	2·56
80 to 90	2·44
90 to 100	2·36
100 to 110	2·30
110 to 120	2·25
120 to 130	2·21
130 to 140	2·17
140 to 150	2·14
150 to 160	2·12
160 to 170	2·10
Above 170	2·09

These factors have been used in deducing the values given in the following Tables, under the heading of Robinson's Anemometer, from the observed results of Whewell's Anemometer.

MONTHLY STATEMENT of the MEAN DAILY HORIZONTAL MOVEMENT of the AIR, in MILES, as found by converting the OBSERVED INDICATIONS of WHEWELL'S ANEMOMETER into corresponding INDICATIONS of ROBINSON'S ANEMOMETER, from 1843, September, to 1859, October; with the INDICATIONS of ROBINSON'S ANEMOMETER, as observed in November and December.

Month.	1843.	1844.	1845.	1846.	1847.	1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.	1858.	1859.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles	Miles.	Miles.	Miles.
January....	..	322	339	.	242	266	435	237	278	340	259	250	160	229	237	267	242
February ...	..	362	267	251	312	514	286	366	212	329	200	291	176	284	174	205	320
March	..	520	349	319	252	310	..	197	261	229	174	205	176	234	215	212	318
April.......	..	..	338	250	261	284	171	251	200	222	263	200	227	288	215	187	291
May	..	338	289	219	..	227	216	234	195	217	229	233	266	317	176	227	195
June.......	..	340	249	212	317	370	182	215	291	235	232	235	212	197	267	139	163
July	..	..	235	302	224	304	261	210	248	165	261	202	184	215	235	197	171
August	..	195	286	219	246	304	202	268	242	219	174	202	246	190	150	..	210
September..	250	217	285	197	312	229	176	200	187	168	217	203	192	222	168	232	229
October....	329	340	286	337	261	310	229	267	242	217	187	212	244	167	200	244	165
November ..	349	284	339	302	286	359	219	335	182	344	168	233	173	222	153	184	209
December ..	281	200	424	285	362	347	261	244	181	368	156	389	257	302	250	217	152
Means	..	312	307	263	280	319	240	252	227	254	210	238	209	239	204	210	223

The following TABLE shows the NUMBER of DAYS from which each MEAN is derived, in those MONTHS in which the ANEMOMETER was not in use every DAY.

1843	September..........	15
	October............	25
1844	March.............	12
	May...............	27
	June..............	17
	August............	10
	October...........	25
1845	August............	9
	December..........	27
1846	February..........	18
1847	June..............	15
	December..........	22
1848	January...........	24
	April..............	28
	August............	21
	September.........	23
1849	April..............	9
	July...............	23
	October...........	28
1850	March.............	29
	April..............	23
1852	February..........	22
	September.........	26
	October...........	24
1853	April..............	22
	December..........	27
1854	May...............	24
	July...............	28
	September.........	16
1855	January..........	14
	February..........	21
1859	January..........	21
	February..........	20
	March............	23
	October..........	23
	December.........	22

IV.—WEEKLY AND MONTHLY MEANS OF THE READINGS OF THE DEEP-SUNK THERMOMETERS, FROM 1848 TO 1855.

In the printed volumes of Meteorological Observations from the year 1848 to 1855 inclusive, the Daily Readings of Thermometers sunk in the ground are given; since that time the Weekly and Monthly Means have been published as well as the Daily Observations.

The whole of the Weekly and Monthly Temperatures of all the Deep-sunk Thermometers for the years 1848 to 1855 are given in the Tables here subjoined.

WEEKLY MEANS of READINGS of DEEP-SUNK THERMOMETERS.

1848. Period.	Thermometers sunk in the ground.					Thermometer inclosed in the box which covers the scales of the Deep-sunk Thermometers, and placed on a level with their scales.
	Bulb 24 French Feet deep.	Bulb 12 French Feet deep.	Bulb 6 French Feet deep.	Bulb 3 French Feet deep.	Bulb 1 Inch deep.	
d d	°	°	°	°	°	°
January 1 to January 7	51·65	50·62	47·17	43·27	41·8	42·1
8 to 14	51·55	50·02	46·38	41·93	38·6	37·4
15 to 21	51·45	49·45	45·56	41·19	37·0	35·5
22 to 28	51·32	48·87	44·67	39·58	31·8	29·3
29 to February 4	51·21	48·30	43·79	38·98	38·8	40·3
February 5 to 11	51·09	47·67	43·73	41·73	46·4	48·0
12 to 18	50·91	47·17	44·51	43·02	43·1	44·1
19 to 25	50·74	47·05	44·72	42·22	44·8	47·1
26 to March 3	50·51	46·75	44·82	43·50	44·8	45·3
March 4 to 10	50·31	46·69	44·90	42·68	42·4	44·4
11 to 17	50·14	46·66	44·88	42·78	42·5	42·7
18 to 24	49·92	46·47	44·75	42·92	45·0	47·1
25 to 31	49·79	46·46	45·20	44·78	49·4	52·9
April 1 to April 7	49·66	46·53	46·46	48·06	53·8	59·4
8 to 14	49·51	46·79	47·49	47·21	47·0	49·3
15 to 21	49·30	47·05	47·62	47·65	50·4	53·0
22 to 26	49·13	47·27	48·10	48·05	47·6	47·0
29 to May 5	49·11	47·54	48·13	48·00	53·2	59·3
May 6 to 12	49·10	47·77	49·32	52·45	62·6	71·8
13 to 19	49·05	48·11	51·45	56·26	64·0	68·6
20 to 28	49·04	48·79	53·07	56·92	62·8	69·0
27 to June 2	49·03	49·52	54·11	58·19	61·7	65·3
June 3 to 9	49·05	50·20	54·67	57·34	60·5	62·8
10 to 16	49·11	50·80	54·96	57·57	62·1	65·4
17 to 23	49·20	51·29	55·55	58·95	63·9	66·3
24 to 30	49·30	51·73	56·25	59·61	61·7	62·9
July 1 to July 7	49·44	52·26	56·61	59·34	64·5	68·6
8 to 14	49·58	52·71	57·28	60·88	65·8	71·7
15 to 21	49·73	53·14	58·52	62·72	66·3	69·0
22 to 28	49·87	53·62	59·13	61·76	63·3	65·3
29 to August 4	50·04	54·11	59·28	61·57	62·8	65·4
August 5 to 11	50·21	54·46	59·25	60·45	60·5	63·3
12 to 18	50·38	54·75	58·83	59·93	60·9	63·2
19 to 25	50·57	54·94	58·70	59·54	59·2	61·1
26 to September 1	50·77	55·09	58·38	59·69	61·6	64·1
September 2 to 8	50·97	55·23	58·33	59·89	62·5	67·1
9 to 15	51·10	55·25	58·21	59·05	56·2	60·2
16 to 22	51·28	55·37	57·58	57·21	57·6	66·1
23 to 29	51·42	55·31	57·00	57·58	59·5	61·1
30 to October 6	51·62	55·31	56·99	57·45	59·9	63·7
October 7 to 13	51·72	55·19	56·86	57·29	55·5	58·3
14 to 20	51·80	55·08	56·03	54·26	50·2	48·5
21 to 27	51·95	54·96	54·55	52·12	51·4	53·7
28 to November 3	52·08	54·56	53·44	51·10	48·5	50·1
November 4 to 10	52·13	54·11	52·51	48·83	42·9	43·5
11 to 17	52·16	53·58	51·01	46·52	42·8	44·5
18 to 24	52·18	52·97	49·88	46·22	47·4	49·5
25 to December 1	52·17	52·32	49·48	46·92	47·5	47·4
December 2 to 8	52·16	51·80	49·24	46·33	47·3	49·9
9 to 15	52·11	51·34	49·01	47·29	50·1	52·4
16 to 22	52·02	50·94	48·90	46·58	43·3	42·9
23 to 31	51·90	50·65	47·83	43·49	42·0	42·2

WEEKLY MEANS of READINGS of DEEP-SUNK THERMOMETERS—*continued.*

1849. Period.	Thermometers sunk in the ground.					Thermometer inclosed in the box which covers the scales of the Deep-sunk Thermometers, and placed on a level with their scales.
	Bulb 24 French Feet deep.	Bulb 12 French Feet deep.	Bulb 6 French Feet deep.	Bulb 3 French Feet deep.	Bulb 1 Inch deep.	
d d	°	°	°	°	°	°
January 1 to January 7	51·84	50·11	46·78	42·06	34·4	32·0
8 to 14	51·64	49·60	45·49	40·70	41·0	41·6
15 to 21	51·54	49·02	45·28	42·71	45·7	47·8
22 to 28	51·40	48·55	45·87	44·32	45·9	47·8
29 to February 4	51·21	48·26	45·96	43·05	41·7	42·3
February 5 to 11	51·06	48·11	45·79	43·89	45·2	47·0
12 to 18	50·86	47·88	45·77	42·91	40·6	42·9
19 to 25	50·71	47·70	45·43	43·25	45·6	48·4
26 to March 4	50·51	47·38	45·31	42·97	43·2	46·2
March 5 to 11	50·33	47·21	45·34	43·74	43·7	46·5
12 to 18	50·19	47·13	45·39	43·38	46·9	50·4
19 to 25	50·03	47·05	45·71	44·36	43·5	43·5
26 to April 1	49·89	46·99	45·67	43·30	43·7	46·2
April 2 to 8	49·77	46·91	45·67	44·59	47·8	51·3
9 to 15	49·66	46·94	46·35	45·70	45·5	46·8
16 to 22	49·50	46·91	46·33	44·42	42·2	43·4
23 to 29	49·39	46·94	45·97	44·47	48·3	52·2
30 to May 6	49·32	46·89	46·75	47·83	56·8	64·6
May 7 to 13	49·20	47·03	48·34	50·07	50·9	50·5
14 to 20	49·13	47·42	49·09	50·68	56·2	59·8
21 to 27	49·07	47·85	50·14	52·52	58·7	64·0
28 to June 3	48·98	48·39	51·99	55·56	62·0	67·7
June 4 to 10	48·96	48·99	53·40	57·93	64·4	70·2
11 to 17	48·97	49·68	54·49	57·59	59·5	64·3
18 to 24	49·04	50·42	55·00	58·22	63·5	69·3
25 to July 1	49·08	51·01	55·89	60·39	65·7	69·5
July 2 to 8	49·20	51·62	56·85	60·77	65·7	69·7
9 to 15	49·34	52·26	57·69	62·73	69·5	76·4
16 to 22	49·45	52·83	58·05	62·87	64·5	66·5
23 to 29	49·59	53·41	58·00	60·70	61·0	63·4
30 to August 5	49·79	53·87	57·88	60·64	62·7	67·9
August 6 to 12	50·01	54·22	58·33	61·21	68·9	74·2
13 to 19	50·18	54·43	58·25	62·05	63·3	65·9
20 to 26	50·37	54·75	58·22	61·07	64·7	68·8
27 to September 2	50·58	55·05	58·68	60·33	65·5	69·0
September 3 to 9	50·75	55·28	58·21	62·16	64·8	70·7
10 to 16	50·90	55·47	58·05	60·58	61·0	62·2
17 to 23	51·09	55·64	57·99	58·79	59·8	61·9
24 to 30	51·27	55·69	57·92	58·26	60·7	65·6
October 1 to October 7	51·41	55·55	57·61	57·52	53·3	53·6
8 to 14	51·57	55·47	56·51	54·42	49·1	50·2
15 to 21	51·74	55·29	55·05	52·31	54·1	59·9
22 to 28	51·86	54·84	54·48	53·71	55·8	59·4
29 to November 4	51·91	54·46	54·43	53·31	51·5	55·0
November 5 to 11	52·01	54·17	53·67	51·43	50·3	52·4
12 to 18	52·06	53·86	52·99	50·81	47·8	50·3
19 to 25	52·07	53·47	51·93	48·64	46·1	45·6
26 to December 2	52·07	53·00	50·74	45·95	39·1	38·0
December 3 to 9	52·11	52·47	49·04	44·82	42·8	42·5
10 to 16	52·09	51·78	48·31	44·07	42·3	41·4
17 to 23	52·02	51·10	47·84	45·25	43·6	43·2
24 to 31	51·90	50·49	47·08	44·08	35·7	34·9

WEEKLY MEANS of READINGS of DEEP-SUNK THERMOMETERS—*continued.*

1850. Period.	Thermometers sunk in the ground.					Thermometer inclosed in the box which covers the scales of the Deep-sunk Thermometers, and placed on a level with their scales.
	Bulb 24 French Feet deep.	Bulb 12 French Feet deep.	Bulb 6 French Feet deep.	Bulb 3 French Feet deep.	Bulb 1 Inch deep.	
d d	°	°	°	°	°	°
January 1 to January 7	51·80	49·96	45·74	40·52	37·3	36·7
8 to 14	51·68	49·30	44·81	39·38	33·6	31·3
15 to 21	51·53	48·62	44·51	38·24	34·3	33·0
22 to 28	51·40	47·97	43·09	38·26	39·8	32·9
29 to February 4	51·24	47·34	43·06	39·90	43·4	45·8
February 5 to 11	51·05	46·85	43·71	41·50	43·6	46·3
12 to 18	50·84	46·63	43·96	41·42	43·6	46·1
19 to 25	50·62	46·46	44·25	42·85	45·8	48·9
26 to March 4	50·40	46·40	44·76	43·12	43·8	46·1
March 5 to 11	50·19	46·38	44·95	43·27	43·3	46·3
12 to 18	50·00	46·43	45·02	42·85	41·7	45·2
19 to 25	49·81	46·36	44·68	41·86	41·2	44·4
26 to April 1	49·64	46·23	44·27	40·90	40·4	44·0
April 2 to 8	49·52	46·09	44·28	43·71	51·2	56·1
9 to 15	49·38	46·01	45·51	46·10	49·7	52·5
16 to 22	49·33	46·14	46·47	46·98	52·3	54·3
23 to 29	49·12	46·33	47·19	47·52	49·1	53·3
30 to May 6	49·00	46·70	47·68	47·96	49·4	52·0
May 7 to 13	48·92	47·03	48·02	47·93	49·9	52·0
14 to 20	48·82	47·21	48·39	49·15	52·1	55·3
21 to 27	48·79	47·50	49·33	51·61	58·3	63·1
28 to June 3	48·80	47·92	50·65	53·74	59·0	67·9
June 4 to 10	48·75	48·36	52·20	56·64	62·9	68·1
11 to 17	48·75	49·05	53·60	57·45	61·5	64·0
18 to 24	48·83	49·75	54·52	57·82	65·7	75·2
25 to July 1	48·79	50·42	55·61	60·95	66·4	72·0
July 2 to 8	48·90	51·04	56·52	60·04	61·9	64·8
9 to 15	49·01	51·73	56·60	59·20	63·9	71·7
16 to 22	49·15	52·22	57·15	61·60	67·8	72·8
23 to 29	49·28	52·71	57·75	62·04	67·9	67·3
30 to August 5	49·45	53·24	58·18	61·05	64·9	69·0
August 6 to 12	49·65	53·69	58·74	62·09	65·4	69·4
13 to 19	49·81	54·06	59·10	61·92	64·5	69·1
20 to 26	49·98	54·41	59·34	61·01	60·4	64·8
27 to September 2	50·19	54·72	58·91	59·69	59·6	63·3
September 3 to 9	50·38	54·89	58·36	58·66	58·7	63·8
10 to 16	50·58	54·94	57·62	57·84	58·8	65·6
17 to 23	50·76	54·89	57·24	57·72	59·3	64·0
24 to 30	50·93	54·83	57·00	57·53	57·7	59·8
October 1 to October 7	51·08	54·78	56·52	56·06	54·1	57·4
8 to 14	51·21	54·64	55·59	53·95	50·0	52·7
15 to 21	51·34	54·44	54·40	51·90	50·4	55·0
22 to 28	51·41	54·02	53·38	50·45	45·8	46·2
29 to November 4	51·53	53·62	52·16	48·93	49·5	51·7
November 5 to 11	51·62	53·21	51·67	49·86	50·4	53·6
12 to 18	51·63	52·67	51·41	49·26	46·8	48·2
19 to 25	51·66	52·35	50·74	48·34	49·5	50·5
26 to December 2	51·64	51·84	50·22	47·27	44·4	41·7
December 3 to 9	51·64	51·61	49·21	45·62	44·2	44·0
10 to 16	51·57	51·10	48·49	45·11	44·4	44·7
17 to 23	51·50	50·55	47·83	43·96	39·0	37·2
24 to 31	51·44	50·07	46·50	41·96	42·9	43·6

WEEKLY MEANS of READINGS of DEEP-SUNK THERMOMETERS—*continued.*

1851. Period.	Thermometers sunk in the ground.					Thermometer inclosed in the box which covers the scales of the Deep-sunk Thermometers, and placed on a level with their scales.
	Bulb 24 French Feet deep.	Bulb 12 French Feet deep.	Bulb 6 French Feet deep.	Bulb 3 French Feet deep.	Bulb 1 Inch deep.	
d d	°	°	°	°	°	°
January 1 to January 7	51·46	49·51	46·32	44·07	46·0	47·3
8 to 14	51·25	49·02	46·52	43·96	44·8	46·6
15 to 21	51·12	48·67	46·48	44·27	45·1	46·0
22 to 28	50·97	48·41	46·11	42·85	41·0	42·3
29 to February 4	50·83	48·17	45·37	42·10	42·5	42·8
February 5 to 11	50·70	47·77	44·89	41·76	42·8	45·1
12 to 18	50·58	47·48	44·73	41·51	41·8	43·7
19 to 25	50·41	47·23	44·58	41·86	45·2	48·4
26 to March 4	50·24	46·91	44·64	41·73	40·8	41·1
March 5 to 11	50·09	46·69	44·30	41·32	41·7	44·0
12 to 18	49·90	46·42	44·06	41·38	42·7	45·1
19 to 25	49·70	46·04	44·06	41·86	46·7	50·3
26 to April 1	49·53	45·94	44·93	44·34	47·1	50·8
April 2 to 8	49·39	46·12	45·56	44·68	46·3	49·0
9 to 15	49·23	46·27	45·71	44·29	45·5	47·2
16 to 22	49·14	46·33	46·06	46·10	52·4	54·1
23 to 29	48·97	46·43	47·27	48·22	50·8	54·0
30 to May 6	48·85	46·73	47·80	47·26	48·1	51·6
May 7 to 13	48·79	47·02	47·90	48·09	54·3	57·4
14 to 20	48·73	47·25	48·80	50·21	54·8	58·5
21 to 27	48·71	47·60	49·66	51·58	57·3	61·6
28 to June 3	48·72	48·06	50·84	54·08	61·1	68·8
June 4 to 10	48·68	48·47	52·22	55·56	59·0	59·2
11 to 17	48·69	49·10	53·01	55·65	58·8	63·3
18 to 24	48·73	49·66	53·69	57·04	63·1	71·6
25 to July 1	48·82	50·26	54·95	59·52	68·4	78·6
July 2 to 8	48·90	50·87	56·52	61·62	65·2	70·1
9 to 15	48·97	51·56	57·21	60·74	62·9	66·9
16 to 22	49·11	52·25	57·40	60·26	62·9	67·5
23 to 29	49·25	52·70	57·45	60·22	63·2	65·5
30 to August 5	49·42	53·16	57·94	61·45	66·0	71·7
August 6 to 12	49·59	53·54	58·46	63·12	67·5	72·9
13 to 19	49·78	54·02	59·05	63·52	67·2	72·0
20 to 26	49·97	54·42	59·51	63·12	64·7	71·9
27 to September 2	50·14	54·90	59·02	60·02	61·3	64·0
September 3 to 9	50·34	55·18	58·80	60·84	63·2	65·2
10 to 16	50·54	55·32	58·67	59·79	59·3	66·7
17 to 23	50·73	55·49	58·36	59·09	60·0	65·2
24 to 30	50·92	55·36	57·96	58·14	56·0	59·7
October 1 to October 7	51·10	55·31	57·12	56·24	55·0	58·9
8 to 14	51·24	55·20	56·29	55·56	57·1	61·7
15 to 21	51·50	54·90	55·88	55·17	54·4	57·1
22 to 28	51·52	54·69	55·35	54·81	54·7	55·2
29 to November 4	51·59	54·38	54·68	52·33	45·6	43·6
November 5 to 11	51·67	54·12	53·07	48·66	44·0	45·8
12 to 18	51·72	53·59	51·50	47·22	41·1	40·2
19 to 25	51·76	52·96	49·83	44·01	39·4	41·0
26 to December 2	51·81	52·23	48·30	42·77	37·5	36·4
December 3 to 9	51·84	51·47	47·23	42·56	43·8	44·0
10 to 16	51·76	50·61	47·07	44·16	43·1	42·2
17 to 23	51·68	50·07	47·02	44·02	44·6	45·0
24 to 31	51·54	49·58	46·83	43·22	39·0	37·3

WEEKLY MEANS OF READINGS OF DEEP-SUNK THERMOMETERS—*continued.*

1852. Period.	Thermometers sunk in the ground.					Thermometer inclosed in the box which covers the scales of the Deep-sunk Thermometers, and placed on a level with their scales.
	Bulb 24 French Feet deep.	Bulb 12 French Feet deep.	Bulb 6 French Feet deep.	Bulb 3 French Feet deep.	Bulb 1 Inch deep.	
d d	°	°	°	°	°	°
January 1 to January 7	51·41	49·21	45·96	41·33	40·2	41·2
8 to 14	51·28	48·76	45·27	41·59	43·2	44·2
15 to 21	51·13	48·22	45·23	42·99	45·6	47·6
22 to 28	50·98	47·90	45·38	42·64	42·8	43·6
29 to February 4	50·81	47·66	45·10	42·45	44·0	46·2
February 5 to 11	50·62	47·37	45·29	43·64	43·9	44·8
12 to 18	50·46	47·20	45·19	42·07	41·7	45·1
19 to 25	50·28	47·03	44·74	41·39	38·5	40·2
26 to March 3	50·12	46·78	44·18	40·63	40·6	43·6
March 4 to 10	49·98	46·50	43·77	40·06	40·0	44·8
11 to 17	49·80	46·25	43·65	40·98	42·2	44·2
18 to 24	49·71	46·00	43·96	42·05	45·3	53·5
25 to 31	49·54	45·94	44·48	43·31	46·1	49·1
April 1 to April 7	49·40	45·92	45·00	44·22	46·5	51·7
8 to 14	49·25	46·00	45·71	45·61	50·0	57·9
15 to 21	49·10	46·14	46·60	47·09	49·1	53·3
22 to 28	48·98	46·41	47·33	47·67	52·9	59·0
29 to May 5	48·83	46·60	47·93	48·49	51·8	55·9
May 6 to 12	48·75	46·93	48·50	49·51	54·9	60·4
13 to 19	48·68	47·28	49·38	51·36	57·5	61·5
20 to 26	48·66	47·73	50·56	53·22	57·1	60·3
27 to June 2	48·64	48·25	51·34	53·12	54·2	57·9
June 3 to 9	48·64	48·74	51·74	53·87	59·2	62·8
10 to 16	48·65	49·16	52·39	54·59	56·2	58·8
17 to 23	48·70	49·62	53·06	55·45	60·2	63·5
24 to 30	48·77	50·06	53·96	57·15	62·6	64·7
July 1 to July 7	48·85	50·57	55·10	59·38	70·2	77·5
8 to 14	48·93	51·14	57·04	63·62	72·5	80·0
15 to 21	49·05	51·96	58·73	65·28	71·5	77·4
22 to 28	49·20	52·91	59·23	65·52	70·2	75·8
29 to August 4	49·35	53·68	59·45	65·76	68·9	72·2
August 5 to 11	49·51	54·36	59·42	63·91	64·2	66·5
12 to 18	49·72	54·94	59·17	62·20	63·8	68·3
19 to 25	49·94	55·36	59·00	62·88	65·1	68·0
26 to September 1	50·20	55·58	59·46	63·46	66·0	70·8
September 2 to 8	50·45	55·83	59·43	63·19	68·2	69·4
9 to 15	50·66	56·05	59·41	61·98	61·4	63·9
16 to 22	50·87	56·20	58·20	59·40	57·4	58·7
23 to 29	51·11	56·24	58·76	57·89	57·8	61·5
30 to October 6	51·34	56·07	57·58	56·22	52·8	54·4
October 7 to 13	51·56	55·83	56·10	53·29	49·1	51·7
14 to 20	51·73	55·39	54·81	52·29	50·6	54·6
21 to 27	51·84	54·85	53·94	51·68	50·5	51·6
28 to November 3	52·04	54·36	52·94	50·59	51·6	54·1
November 4 to 10	52·14	53·88	52·80	51·95	54·2	56·3
11 to 17	52·21	53·51	52·64	51·61	51·4	51·8
18 to 24	52·25	53·16	52·02	49·80	46·5	46·1
25 to December 1	52·25	52·80	51·06	48·01	44·6	46·2
December 2 to 8	52·21	52·50	50·27	47·17	47·7	48·4
9 to 15	52·14	52·05	50·07	48·20	50·8	52·4
16 to 22	52·01	51·71	50·05	47·91	47·3	48·2
23 to 31	51·95	51·33	49·52	47·12	47·3	48·3

WEEKLY MEANS OF READINGS OF DEEP-SUNK THERMOMETERS—*continued.*

1853. Period.	Thermometers sunk in the ground.					Thermometer inclosed in the box which covers the scales of the Deep-sunk Thermometers, and placed on a level with their scales.
	Bulb 24 French Feet deep.	Bulb 12 French Feet deep.	Bulb 6 French Feet deep.	Bulb 3 French Feet deep.	Bulb 1 Inch deep.	
d d	°	°	°	°	°	°
January 1 to January 7	51·85	51·00	49·16	46·86	47·5	48·8
8 to 14	51·74	50·67	48·63	45·81	45·8	46·9
15 to 21	51·65	50·32	48·04	44·85	44·4	45·5
22 to 28	51·48	49·90	47·42	43·86	40·6	39·5
29 to February 4	51·34	49·48	46·64	42·55	39·3	38·6
February 5 to 11	51·23	49·09	45·91	41·78	39·0	38·2
12 to 18	51·06	48·61	45·20	40·42	35·3	35·6
19 to 25	50·97	48·17	44·22	38·75	35·5	36·4
26 to March 4	50·79	47·51	43·26	38·31	37·3	38·8
March 5 to 11	50·68	46·97	43·09	40·35	44·6	49·0
12 to 18	50·47	46·51	43·99	42·14	43·8	42·1
19 to 25	50·28	46·32	44·01	40·37	37·2	38·3
26 to April 1	50·09	46·18	43·43	39·99	44·7	49·5
April 2 to 8	49·90	45·89	43·91	43·42	49·5	53·3
9 to 15	49·71	45·85	45·17	44·73	46·3	48·7
16 to 22	49·54	45·99	45·65	45·26	47·2	51·3
23 to 29	49·33	46·15	46·22	45·60	44·2	46·4
30 to May 6	49·15	46·32	46·59	47·06	52·5	56·8
May 7 to 13	48·99	46·55	47·55	47·52	48·3	49·9
14 to 20	48·92	46·90	48·11	49·65	58·3	66·1
21 to 27	48·83	47·15	49·82	53·21	61·0	72·3
28 to June 3	48·77	47·74	51·52	54·66	58·3	60·2
June 4 to 10	48·75	48·47	52·27	54·94	63·6	69·5
11 to 17	48·76	49·12	53·41	57·06	63·6	69·1
18 to 24	48·77	49·71	54·38	57·46	61·6	66·0
25 to July 1	48·86	50·39	54·80	58·27	63·4	66·5
July 2 to 8	48·93	50·94	55·62	59·02	62·5	71·1
9 to 15	49·03	51·65	56·86	60·97	63·6	65·5
16 to 22	49·18	52·50	57·93	59·84	62·9	65·6
23 to 29	49·34	52·85	57·90	60·46	64·1	68·4
30 to August 5	49·52	53·26	58·14	61·24	66·3	70·9
August 6 to 12	49·72	53·63	58·71	62·04	65·5	71·6
13 to 19	49·88	53·99	59·15	61·84	63·9	67·0
20 to 26	50·07	54·39	59·18	61·64	64·0	67·0
27 to September 2	50·28	54·71	58·93	60·08	60·1	63·7
September 3 to 9	50·48	54·94	58·45	59·05	59·6	63·0
10 to 16	50·70	55·04	57·97	58·62	60·3	63·0
17 to 23	50·90	55·05	57·76	58·39	59·9	63·4
24 to 30	51·08	55·04	57·30	56·98	61·6	58·3
October 1 to October 7	51·21	54·94	56·33	54·86	58·5	52·9
8 to 14	51·38	54·78	55·31	54·13	54·6	56·8
15 to 21	51·54	54·50	54·85	53·46	51·4	53·8
22 to 28	51·69	54·25	54·23	53·38	57·1	60·8
29 to November 4	51·81	53·95	54·08	62·82	52·0	54·6
November 5 to 11	51·83	53·68	53·42	51·59	49·7	50·4
12 to 18	51·83	53·33	52·22	48·49	42·7	41·9
19 to 25	51·83	52·88	50·50	45·11	39·3	40·1
26 to December 2	51·85	52·23	48·56	43·92	43·6	43·8
December 3 to 9	51·82	51·51	48·04	44·13	42·2	41·5
10 to 16	51·76	50·78	47·46	42·96	38·8	37·2
17 to 23	51·67	50·19	46·34	40·82	36·0	33·6
24 to 31	51·52	49·48	45·11	39·35	33·8	31·7

WEEKLY MEANS of READINGS of DEEP-SUNK THERMOMETERS—*continued.*

1854. Period.	Thermometers sunk in the ground.					Thermometer inclosed in the box which covers the scales of the deep-sunk Thermometers and placed on a level with their scales.
	Bulb 24 French Feet deep.	Bulb 12 French Feet deep.	Bulb 6 French Feet deep.	Bulb 3 French Feet deep.	Bulb 1 Inch deep.	
d d	°	°	°	°	°	°
January 1 to January 7	51·38	48·61	43·88	37·65	34·2	32·7
8 to 14	51·23	47·97	42·69	37·70	38·1	38·6
15 to 21	51·06	47·22	42·84	39·58	43·5	45·5
22 to 28	50·84	46·72	43·49	40·90	43·4	46·0
29 to February 4	50·65	46·49	43·97	42·46	44·2	45·2
February 5 to 11	50·37	46·34	44·39	42·25	43·7	46·3
12 to 18	50·16	46·26	44·12	40·38	38·8	37·9
19 to 25	49·96	46·11	43·46	39·93	41·6	46·7
26 to March 4	49·77	45·80	43·42	40·64	41·6	49·5
March 5 to 11	49·54	45·62	43·44	41·28	46·0	50·0
12 to 18	49·40	45·48	44·35	44·09	48·4	53·7
19 to 25	49·20	45·51	44·90	43·24	43·2	44·2
26 to April 1	49·04	45·62	44·87	43·46	47·6	54·9
April 2 to 8	48·89	45·68	45·59	46·00	51·4	60·5
9 to 15	48·77	45·83	46·69	47·99	54·3	59·8
16 to 22	48·67	46·23	47·96	49·84	56·6	64·2
23 to 29	48·46	46·65	48·84	49·33	48·6	51·1
30 to May 6	48·46	47·07	48.66	48·67	52·2	56·6
May 7 to 13	48·43	47·33	49·02	49·62	51·8	57·1
14 to 20	48·40	47·59	49·76	51·84	55·8	63·0
21 to 27	48·40	47·92	50·90	53·20	56·2	58·4
28 to June 3	48·40	48·38	51·55	53·23	56·2	60·5
June 4 to 10	48·41	48·81	51·90	53·82	55·9	59·5
11 to 17	48·45	49·22	52·60	54·86	59·3	63·7
18 to 24	48·54	49·68	53·43	56·27	62·6	67·5
25 to July 1	48·61	50·09	54·54	58·67	62·2	63·8
July 2 to 8	48·63	50·68	55·36	58·43	61·8	64·2
9 to 15	48·81	51·24	55·75	58·24	60·4	62·9
16 to 22	48·94	51·73	56·09	59·50	66·0	73·3
23 to 29	49·09	52·18	57·49	63·10	70·1	76·3
30 to August 5	49·21	52·70	58·93	62·85	61·3	63·6
August 6 to 12	49·40	53·40	58·88	60·66	63·9	68·5
13 to 19	49·59	53·86	58·86	61·40	64·7	68·1
20 to 26	49·78	54·17	58·82	61·32	63·8	69·8
27 to September 2	49·97	54·50	59·10	62·70	70·0	77·1
September 3 to 9	50·15	54·76	59·11	62·59	64·5	72·7
10 to 16	50·35	55·09	58·08	61·51	63·8	70·3
17 to 23	50·52	56·31	58·44	61·18	60·4	63·4
24 to 30	50·71	55·46	58·76	58·74	56·8	64·2
October 1 to October 7	50·81	55·42	57·75	57·06	57·2	61·7
8 to 14	51·06	55·31	56·97	55·51	54·7	58·6
15 to 21	51·31	55·06	55·98	53·90	50·0	51·7
22 to 28	51·37	54·76	54·69	51·47	48·6	52·0
29 to November 4	51·48	54·34	53·41	50·87	51·8	55·7
November 5 to 11	51·61	53·83	52·71	49·66	45·6	46·2
12 to 18	51·64	53·28	51·36	47·40	44·6	44·3
19 to 25	51·63	52·67	50·28	45·76	40·4	39·2
26 to December 2	51·66	52·09	48·82	43·88	41·1	41·1
December 3 to 9	51·65	51·39	47·96	43·94	44·3	45·0
10 to 16	51·63	50·76	47·31	43·09	44·7	45·3
17 to 23	51·55	50·14	46·97	43·32	41·8	41·4
24 to 31	51·39	49·52	46·49	42·94	40·8	40·3

WEEKLY MEANS of READINGS of DEEP-SUNK THERMOMETERS—*concluded.*

1855 Period.	Thermometers sunk in the ground.					Thermometer inclosed in the box which covers the scales of the Deep-sunk Thermometers, and placed on a level with their scales.
	Bulb 24 French Feet deep.	Bulb 12 French Feet deep.	Bulb 6 French Feet deep.	Bulb 3 French Feet deep.	Bulb 1 Inch deep.	
	°	°	°	°	°	°
January 1 to January 7	51·32	49·18	46·00	42·86	46·4	48·1
8 to 14	51·15	48·71	46·23	43·84	42·5	41·8
15 to 21	50·98	48·49	45·82	41·43	33·9	32·5
22 to 28	50·80	48·16	44·62	39·29	33·5	34·4
29 to February 4	50·66	47·59	43·60	38·30	33·6	32·0
February 5 to 11	50·49	47·00	42·77	37·76	34·6	33·1
12 to 18	50·32	46·39	42·17	37·07	31·9	31·8
19 to 25	50·16	45·90	41·52	36·04	31·1	34·6
26 to March 4	49·96	45·35	40·88	36·39	40·4	44·2
March 5 to 11	49·74	44·79	41·39	38·77	38·8	41·7
12 to 18	49·54	44·60	41·71	38·60	42·2	45·1
19 to 25	49·23	44·39	42·17	40·48	41·2	43·2
26 to April 1	49·11	44·34	42·45	39·60	41·0	42·7
April 2 to 8	48·85	44·39	42·56	40·53	44·2	49·1
9 to 15	48·66	44·32	43·39	43·29	49·0	53·0
16 to 22	48·44	44·42	44·87	46·43	52·1	60·5
23 to 29	48·28	44·76	46·34	47·13	49·5	55·5
30 to May 6	48·16	45·31	47·10	47·78	49·3	52·9
May 7 to 13	47·99	45·70	47·57	48·46	51·4	55·8
14 to 20	47·91	46·12	47·99	48·02	50·7	54·7
21 to 27	47·87	46·50	48·84	50·14	58·1	63·7
28 to June 3	47·80	46·76	49·71	52·41	53·8	52·6
June 4 to 10	47·82	47·28	50·44	53·02	60·8	66·6
11 to 17	47·85	47·79	51·87	55·90	60·2	62·7
18 to 24	47·84	48·36	52·72	55·04	58·8	64·6
25 to July 1	47·94	49·11	53·51	57·67	68·1	75·7
July 2 to 8	48·03	49·63	55·12	60·85	67·4	72·7
9 to 15	48·12	50·38	56·72	61·96	66·8	70·9
16 to 22	48·22	51·24	57·40	61·84	63·1	64·8
23 to 29	48·39	51·90	57·81	61·15	64·6	68·0
30 to August 5	48·55	52·49	58·10	61·55	66·2	70·1
August 6 to 12	48·73	52·93	58·92	62·02	65·2	68·0
13 to 19	49·04	53·42	59·00	61·49	65·6	71·5
20 to 26	49·22	53·78	58·93	62·42	66·5	70·6
27 to September 2	49·42	54·09	58·93	62·46	66·4	71·9
September 3 to 9	49·61	54·50	59·00	61·22	61·0	64·4
10 to 16	49·83	54·79	58·00	59·78	59·7	63·8
17 to 23	50·06	54·91	57·80	59·53	62·2	67·7
24 to 30	50·28	54·95	58·36	59·28	60·1	64·4
October 1 to October 7	50·45	54·96	57·86	58·35	58·6	62·0
8 to 14	50·65	54·91	57·18	56·70	55·5	58·6
15 to 21	50·80	54·82	56·24	54·75	53·2	57·2
22 to 28	50·98	54·66	55·04	54·44	53·1	53·9
29 to November 4	51·15	54·27	54·02	51·37	47·2	45·9
November 5 to 11	51·34	53·93	52·62	48·99	48·2	50·9
12 to 18	51·42	53·36	51·74	48·97	44·4	43·8
19 to 25	51·46	52·82	50·80	46·80	42·6	40·8
26 to December 2	51·49	52·26	49·61	45·33	41·9	42·3
December 3 to 9	51·48	51·63	48·60	43·98	39·5	39·0
10 to 16	51·42	50·98	47·26	41·38	36·2	35·2
17 to 23	51·33	50·21	46·00	40·63	33·3	30·3
24 to 31	51·25	49·23	44·75	39·07	44·8	48·4

MONTHLY MEANS of READINGS of DEEP-SUNK THERMOMETERS.

MONTH.	Thermometers sunk in the ground.					[illegible] the Deep-sunk Thermometers, and [illegible] their scales.
	Bulb 24 French Feet deep.	Bulb 12 French Feet deep.	Bulb 6 French Feet deep.	Bulb 3 French Feet deep.	Bulb 1 Inch deep.	
1848.	°	°	°	°	°	°
January	51·47	49·64	45·80	41·28	37·4	36·3
February	50·92	47·39	44·26	42·00	44·1	45·8
March	50·08	46·57	44·93	43·30	44·6	46·2
April	49·39	46·93	47·45	47·72	49·5	52·1
May	49·07	48·28	51·09	54·34	61·6	68·0
June	49·15	50·90	55·28	58·36	61·7	63·9
July	49·68	53·01	57·99	61·21	65·0	68·7
August	50·41	54·70	58·87	60·15	60·8	63·0
September	51·19	55·28	57·78	58·45	58·8	63·3
October	51·81	55·07	55·78	54·75	53·5	55·3
November	52·15	53·44	51·07	47·53	45·5	46·7
December	52·04	51·19	48·73	45·88	45·5	46·6
1849.	°	°	°	°	°	°
January	52·54	49·21	45·88	42·55	41·6	41·9
February	50·97	47·89	45·67	43·28	43·6	45·8
March	50·15	47·11	45·31	43·59	44·3	46·8
April	49·57	46·92	46·09	44·86	46·3	49·1
May	49·15	47·46	49·14	51·15	56·5	60·6
June	49·01	49·91	54·51	58·36	60·3	68·5
July	49·42	52·63	57·67	61·69	65·0	68·8
August	50·22	54·51	58·31	61·44	65·2	69·4
September	50·97	55·49	58·06	60·11	60·9	65·3
October	51·67	55·21	55·75	54·42	50·0	55·8
November	52·04	53·73	52·64	49·75	46·5	47·5
December	52·03	51·51	48·15	44·08	41·1	40·6
1850.	°	°	°	°	°	°
January	51·46	48·80	44·22	39·13	36·7	35·9
February	50·83	46·68	43·96	41·87	44·4	47·3
March	49·99	46·37	44·79	42·44	41·9	45·0
April	49·34	46·16	45·85	46·04	50·4	54·0
May	48·87	47·19	48·54	49·50	53·0	56·2
June	48·78	49·24	53·61	57·84	64·1	69·7
July	49·10	51·96	58·06	60·73	65·2	69·0
August	49·81	54·06	58·92	61·26	63·0	67·0
September	50·65	54·88	57·60	57·97	58·7	63·4
October	51·29	54·38	54·69	52·61	49·5	52·2
November	51·63	52·67	51·16	48·85	48·7	49·5
December	51·54	50·87	48·08	44·21	42·7	42·5
1851.	°	°	°	°	°	°
January	51·16	48·84	46·27	43·62	44·2	45·5
February	50·30	47·50	44·70	41·80	42·7	44·3
March	49·86	46·35	44·33	42·26	44·0	46·8
April	49·18	46·29	46·19	45·84	48·5	51·5
May	48·76	47·29	48·86	49·96	54·8	59·1
June	48·73	49·24	53·22	56·63	62·2	69·2
July	49·67	51·88	57·14	60·73	63·8	67·8
August	49·78	54·02	58·87	62·76	65·5	70·6
September	50·60	55·32	58·48	59·52	60·0	64·7
October	51·36	54·98	56·08	55·32	54·7	57·3
November	51·72	53·41	51·35	46·63	41·2	41·6
December	51·72	50·55	47·10	43·38	42·2	41·8

Monthly Means of Readings of Deep-sunk Thermometers—*concluded*.

MONTH.	Thermometers sunk in the ground.					Thermometer inclosed in the box which covers the scales of the Deep-sunk Thermometers, and placed on a level with their scales.
	Bulb 24 French Feet deep.	Bulb 12 French Feet deep.	Bulb 6 French Feet deep.	Bulb 3 French Feet deep.	Bulb 1 Inch deep.	
1852.	°	°	°	°	°	°
January	51·16	48·43	45·43	42·17	43·1	44·1
February	50·46	47·21	44·97	42·21	42·0	44·1
March	49·79	46·23	43·98	41·50	43·0	47·3
April	49·16	46·15	46·30	46·33	49·9	55·5
May	48·71	47·34	49·53	51·24	55·1	59·1
June	48·69	49·32	52·73	55·07	59·4	62·4
July	49·04	51·85	56·72	63·70	71·0	77·4
August	49·77	54·90	59·29	63·41	65·2	68·5
September	50·77	56·07	59·16	60·60	61·1	63·3
October	51·68	55·39	55·24	52·84	50·2	52·5
November	52·20	53·48	52·26	50·59	50·4	51·6
December	52·09	51·90	49·98	47·55	48·0	49·0
1853.	°	°	°	°	°	°
January	51·66	50·40	48·21	45·16	44·3	44·8
February	51·11	48·68	48·21	40·50	37·0	37·1
March	50·46	46·65	43·53	40·35	41·8	43·7
April	49·41	45·99	45·18	44·59	47·4	50·3
May	48·94	46·84	48·45	50·16	55·8	61·4
June	48·78	49·20	53·46	56·20	62·3	66·9
July	49·12	51·97	57·11	60·10	63·2	67·5
August	49·88	53·97	58·86	61·52	64·2	68·7
September	50·73	55·00	58·00	58·49	60·3	62·2
October	51·48	54·57	55·11	53·94	55·1	55·9
November	51·83	53·23	51·78	48·14	44·9	45·6
December	51·70	50·56	46·79	41·92	38·0	36·4
1854.	°	°	°	°	°	°
January	51·09	47·53	43·30	39·25	40·6	41·7
February	50·21	46·24	43·95	41·15	41·6	44·4
March	49·37	45·59	44·22	42·64	45·3	50·1
April	48·74	46·07	47·13	48·09	52·7	59·4
May	48·42	47·56	49·79	51·08	54·1	58·9
June	48·48	49·31	52·87	55·52	59·8	63·5
July	48·88	51·45	56·22	59·90	64·4	68·8
August	49·57	53·71	58·91	61·63	64·6	69·1
September	50·17	55·11	58·65	61·17	61·6	68·0
October	51·17	55·08	56·12	54·31	52·8	56·7
November	51·61	53·22	51·29	47·48	44·1	43·9
December	51·57	50·61	47·31	43·38	42·9	43·1
1855.	°	°	°	°	°	°
January	51·02	48·53	45·46	41·48	38·4	38·4
February	50·32	46·44	42·17	36·94	33·4	34·0
March	49·48	44·61	41·79	39·05	41·0	43·7
April	48·53	44·50	44·47	44·64	48·9	54·6
May	47·95	46·06	48·07	49·25	52·8	57·4
June	49·85	48·04	51·98	55·12	61·2	66·3
July	48·21	50·91	56·86	61·43	65·6	69·1
August	49·01	53·40	58·83	62·03	66·0	70·6
September	49·93	54·75	58·31	60·06	60·9	65·2
October	50·77	54·78	56·42	55·66	55·8	57·1
November	51·40	53·26	51·57	47·97	44·3	44·3
December	51·38	50·52	46·72	41·52	38·3	37·8

ROYAL OBSERVATORY, GREENWICH.

REDUCTION

OF

THE OBSERVATIONS

OF THE

DEEP-SUNK THERMOMETERS

AT THE

ROYAL OBSERVATORY, GREENWICH,

FROM 1846 TO 1859.

BY

PROFESSOR J. D. EVERETT,

OF KING'S COLLEGE, WINDSOR, NOVA SCOTIA.

REDUCTION

OF THE

OBSERVATIONS OF THE DEEP-SUNK THERMOMETERS,

AT THE ROYAL OBSERVATORY, GREENWICH,

FROM 1846 TO 1859.

By PROFESSOR J. D. EVERETT, King's College, Windsor, Nova Scotia.

MY first operation was to take the means of the readings of each thermometer for each Calendar Month, year by year. For 1846, 7, and for 1856, 7, 8, the means were already given in the *Greenwich Observations*, and in these instances I have simply copied them, not considering it necessary to revise the calculation. The only exceptions to this statement are the means for the 6 ft. and 3 ft. thermometers for March 1858, in which month a number of observations are wanting (the fluid having sunk below the scale); and as the means printed in the *Observations*, being derived only from the recorded readings, were of necessity too high, I adopted in their stead lower values obtained by a rough estimation. I should also state that wherever erroneous readings were pointed out in the *Observations*, I adopted the corrections there suggested; but these corrections were, in all cases, too insignificant to have any appreciable influence on my ultimate results.

The monthly means are given on pages (cci) and (ccii) of the subjoined tabular statement of results; those values which, from the fluid having risen above or fallen below the scale, are doubtful, being enclosed in brackets. These doubtful cases are almost confined to the 6 ft. thermometer. The mean values for the entire year, given in the last column of each page, are simply the arithmetical means of the 12 monthly values; no allowance being made for the unequal lengths of the months.

The observations extend over 13 years and 9 months, commencing with April 1846 and coming down to the end of December 1859. My second operation was to find the mean monthly values for the 13 years which are entire; viz., 1847–1859. They are given on page (cciii), and were derived from the values for each year in the usual manner.

The next operation was to find the co-efficients of the terms in harmonic expressions which should represent the temperature of each thermometer, in terms of the time of year. For an explanation of the process by which they are obtained, I may refer to my Paper in the *Transactions of the Royal Society of Edinburgh*, Vol. xxii, Part II. The process is identical with that described by Sir John Herschel, art. Meteorology, *Enclyclopædia Britannica*, pp. 664, 665. I adopt the notation employed in my own Paper, except that I write,

$$t \text{ instead of } 2\pi\frac{t}{T}$$

that is to say, I adopt the convention that time shall be represented by degrees at the rate of 360° to the year. I should also state that the two forms

$$\sqrt{\frac{\pi c}{Tk}} \text{ and } \sqrt{\frac{\pi c}{k}}$$

the former of which is used in my paper above referred to, and the latter in Professor Thomson's, which immediately precedes it in the *Transactions*, stand for one and the same function; the latter form (which will be here used) implying the convention that a year is the unit of time. For a full discussion of the units employed, see Professor Thomson's Paper, pp. 424–427.

The values of the coefficients A_1, B_1, A_2, B_2, were found by the process exhibited on p. 433 of my Paper in the *Transactions ;* but in the present instance the work was carried to one and sometimes two more places of decimals. The values of E_1 and P_1 were calculated by the formulæ

$$\begin{aligned}\log \tan E_1 &= \log A_1 - \log B_1 + 10 \\ \log P_1 &= \log B_1 + \log \sec E_1 - 10\end{aligned}$$

the value of E_1 being taken to the nearest 10 seconds. The tabular logarithm of P_1 being thus found, the Napierian logarithm was derived from it by a Table. The value of E_1 in circular measure was obtained by a Table of "Lengths of Circular Arcs to Radius Unity." The logarithms were carried to 5 places of decimals ; but the correctness of the 5th decimal place in the values of $\log_e P_1$ and E_1 is not to be depended on.

The next operation was to find the differences in the values of $\log_e P_1$, obtained by comparing the thermometers two and two. The number of thermometers being 4, the number of comparisons is of course 6. The differences in the corresponding values of E_1 (in circular measure) were also found. These latter differences ought to be equal to the former, each to each, if the conditions which theory supposes were exactly fulfilled ; and any one of them divided by the corresponding difference of depth should give the value of the thermal coefficient $\sqrt{\frac{\pi c}{k}}$ for the stratum of soil intervening betweeen the two thermometers compared, k being the conductivity, c the capacity for heat (or specific heat), both referred to the unit of volume, and π the ratio of circumference of circle to diameter. If the surface of the soil is uneven, or if buildings or other objects in the immediate neighbourhood prevent uniformity in the distribution of the surface-temperature, the values of the thermal coefficients derived from P_1 cannot be expected to agree exactly with those derived from E_1. On the other hand, differences in the thermal qualities of the strata of soil intervening between the bulbs of the thermometers would have no tendency to produce discrepancy between the results from P_1 and those from E_1, provided that each stratum is uniform horizontally ; but would merely bring out differences between results for different depths.

In the present instance, the values of $\sqrt{\frac{\pi c}{k}}$ derived from E_1 agree remarkably well among themselves, but differ considerably from the values derived from P_1, which latter differ also among themselves. On taking the means of the 6 determinations furnished by each element, it appears, however, that the discrepancies nearly counterbalance each other; the mean value of $\sqrt{\frac{\pi c}{k}}$ derived from P_1 (amplitude) being ·09158, and that derived from E_1 (epoch) being ·09192. The mean of these two numbers is ·09175.

The values of the same function found for the three stations at Edinburgh were—

Calton Hill, Trap Rock	·1156
Experimental Garden, Sand	·1098
Craigleith Quarry, Sandstone	·06744

The less the value of this function is, the more sensible will the changes of temperature be at any given depth, and the more rapidly will they be felt.

The values of the half-yearly coefficients P_2 and E_2 were derived from those of A_2 and B_2 by a process similar to that already described for P_1 and E_1, and the differences of $\log_e P_2$ and also of E_2, in circular measure, were divided by the corresponding differences of depth. The quotients thus obtained are determinations of the value of $\sqrt{\frac{2\pi c}{k}}$, and have accordingly been divided by $\sqrt{2}$, in order to obtain values of $\sqrt{\frac{\pi c}{k}}$. These latter ought, if the conditions supposed by theory were fulfilled, to agree with those previously obtained from the annual term ; and the 6 values derived from P_2 ought to be equal respectively to the corresponding values derived from E_2. The agreement is much closer in the present instance than in the case of the thermometers at Calton Hill.

Thus far, only the means of the actual readings have been employed ; but in order to ascertain the exact temperatures of the bulbs of the thermometers, it is necessary to apply small corrections for temperature of stem. In applying these corrections, I have adopted the method described by Professor (now Principal) Forbes, *Transactions R. S. E.*, Vol. xvi, Part II., except that, instead of correcting each individual reading, I have corrected the monthly means. In correcting for the temperature of that portion of the stem which is exposed to the air, I made use of the Table on page 203 of Professor Forbes' Paper. The mode of obtaining this correction is sufficiently obvious, bearing in mind that alcohol expands, at ordinary temperatures, by ·000555 of its volume for each degree Fahrenheit. The correction for the temperature of the underground portion of the stem is based upon an approximate formula for the mean temperature of the stem, which, though not pretending to great accuracy, is sufficient for the purpose required. In order to apply this correction, it is of course necessary to know the ratio of the quantity of fluid in the underground portion of the stem to the quantity in the bulb; or, what amounts to the same thing, the number of degrees of the scale that are equivalent to the quantity of fluid in the underground portion of the stem. Respecting this datum I have not been able to obtain direct information; and the analogy of the Edinburgh thermometers does not afford very definite grounds for estimation; for by the Table, p. 198, of Professor Forbes' Paper, it appears that the thermometers at three stations, "Observatory," "Experimental Garden," and "Craigleith," differ considerably, as regards the element in question. I have assumed that the values of "Observatory" are applicable to the Greenwich thermometers; that is to say, that the quantities of fluid in the underground portions of the stems are equivalent respectively to,

$13^\circ\cdot7$ for the 24 ft. thermometer.
$4^\circ\cdot5$,, 12 ,,
$4^\circ\cdot8$,, 6 ,,

I have also applied corrections for the inequality of the Calendar Months. It would scarcely be practicable to do this completely, and I have therefore contented myself with making January, February, and March, of equal length, each containing 30 days, except in leap year, when I give February 31 days. The mode of effecting this correction was, to find, from the *Observations*, the mean temperature of January 31st, also of March 1st, and hence to calculate what the mean temperature would have been for each of the three months, if these two days had been reckoned as belonging to February.

The results obtained by applying the sum of the three several corrections just described, are given in p. (ccv), under the designation of "Corrected Means for the Period 1847–59." Making these corrected means the basis of calculation, I have repeated the operations already described for finding the value of $\sqrt{\frac{\pi c}{k}}$. The results from the half-yearly term are improved by the application of the corrections; but in the case of the annual term (which is far more important) the discrepancies are increased.

I may remark that I have tried the effect of omitting the second of the above-mentioned corrections and applying the other two; also the effect of applying the first only, and the first two only. These experiments were confined to the annual term, and the results were in each case more discrepant than those obtained from the uncorrected temperatures. I have therefore thought it unnecessary to give them.

With the view of ascertaining whether the values of the coefficients have continued uniform throughout the whole period of observation, I have divided it into three shorter periods; the first containing 4 years and 9 months, the second 5 years, and the third 4 years. The monthly means for each of these periods (uncorrected) are given on p. (ccvi), together with the values of A_0, P_1, $\log_e P_1$ and E_1, derived from them, and on p. (ccvii), the resulting values of $\sqrt{\frac{\pi c}{k}}$ are shown. On inspecting these last results, it will be observed that the values diminish from each period to the next; and also that the agreement between results from amplitude and those from epoch improves. Both these facts are very singular; and I can offer no satisfactory explanation of them. The *primâ facie* inference is, that some change has taken place in the soil, probably as regards moisture. Drainage, building, planting, or clearing may be suggested as possible causes. The diminution of $\sqrt{\frac{\pi c}{k}}$ indicates either a decrease in capacity for heat, or an increase in conductivity.

Another singular fact appears on inspecting the values of A_0 (mean temperature of the year) given on p. (ccvi), viz., that the mean temperature at 6 ft. has, in each of the three periods, been greater than at any other depth. I do not think this circumstance can be due to errors in the estimated readings of the 6 ft. thermometer. On the contrary, these readings appear to have been rather under-estimated; for it will be observed, that in deriving values of $\sqrt{\frac{\pi c}{k}}$ from comparison of the values of the $\log_e P_1$ for every pair of thermometers, the least values have been obtained from comparison of those at 12 ft. and 6 ft., and the greatest from those at 6 ft. and 3 ft.; whereas no such difference is observable in the values derived from E_1. Hence it appears that the value which we have given to P_1 for the 6 ft. thermometer is too small; and therefore the range (which is approximately double of P_1) is too small; and since the estimated readings have been taken at the time of maximum temperature, the inference is that they also are too small.

As matter of curiosity rather than use, I have given, on p. (ccvii) the values of the coefficients, and the resulting values of $\sqrt{\frac{\pi c}{k}}$, for the terms whose periods are respectively one-third and one-fourth of a year. These terms are of the form

$$P_3 \,.\, \sin(3t + E_3) + P_4 \,.\, \sin(4t + E_4)$$

and are to be appended to the annual and half-yearly terms whose coefficients have already been found. The values for these two additional terms have been derived from the "Corrected Means," by a process analogous to that which was used for the two preceding terms.

On p. (ccviii) are given the "Corrections necessary to reduce Calculated to Actual Temperatures ;" that is to say, the differences between the observed monthly temperatures and the values of v furnished by each of the expressions

$$v = A_0 + P_1 \,.\, \sin (t + E_1)$$
$$v = A_0 + P_1 \,.\, \sin (t + E_1) + P_2 \,.\, \sin (2\,t + E_2)$$

the sign + being used to denote excess of observed above calculated temperature. In the construction of this Table the "Corrected Means" and "Corrected Values of Coefficients," p. (ccv), have been employed. In the first set of corrections the occurrence of double maxima and minima in the year is very marked. The corrections here given in no way affect the accuracy of the results previously deduced, since each term in the series for v is independent of the rest.

The relation between results derived (as ours have been) from monthly means, and those which would be furnished by daily means, is as follows :—

Let the monthly mean temperature be represented by the expression—

$$A_0 + P_1 \,.\, \sin (t + E_1) + P_2 \,.\, \sin (2\,t + E_2)$$

(t being the time for the centre of the month),

then the daily, or more strictly, the instantaneous temperature will be

$$A_0 + P_1 \frac{\text{arc } 15^\circ}{\sin 15^\circ} \sin (t + E_1) + P_2 \frac{\text{arc } 30^\circ}{\sin 30^\circ} \sin (2\,t + E_2).$$

Hence the only alteration necessary for rendering our results applicable to daily mean temperatures, is to multiply the values found for P_1 and P_2 by the under-mentioned factors :—

P_1 must be multiplied by $\frac{\text{arc } 15^\circ}{\sin 15^\circ}$ that is by 1·0115

P_2 ,, ,, $\frac{\text{arc } 30^\circ}{\sin 30^\circ}$,, 1·0472

Similarly—

P_3 ,, ,, $\frac{\text{arc } 45^\circ}{\sin 45^\circ}$,, 1·1107

P_4 ,, ,, $\frac{\text{arc } 60^\circ}{\sin 60^\circ}$,, 1·2092

Since these factors are the same for all the thermometers, the difference of $\log_e P_1$, obtained by comparing any two thermometers, will remain unchanged. Hence the mode, in which we have derived $\sqrt{\frac{\pi c}{k}}$ from the values of $\log_e P_1$, requires no correction ; and the same remark applies to $\log_e P_2$, $\log_e P_3$, $\log_e P_4$. It is evident that the values of E_1, E_2, E_3, E_4 require no correction.

It appears from the foregoing investigation, that the value of $\sqrt{\frac{\pi c}{k}}$ for the soil in which the Greenwich thermometers are sunk is about ·092.

If it be required to find approximately the effect, at any given depth, of the daily range of temperature at the surface, we may proceed as follows :—Assume the daily variation at the surface to follow a simple harmonic law, which is the same for every day in the year : employing the same units as we have hitherto used, the term expressing daily variation will be of the form

$$P \,.\, \sin (365\,t + E)$$

and the diminution of $\log_e P$ for each foot of depth will be,

$$\sqrt{\frac{365\,\pi\,c}{k}} = \sqrt{365} \times {·092} = 1{·}758,$$

which is the Napierian logarithm of 5·80. Hence the amplitude P diminishes in the ratio of 1 : 5·8 for each foot of depth ; and the daily range at the depth of 3 feet will be only $\left(\frac{1}{5{·}8}\right)^3$, or about $\frac{1}{195}$th of that at the surface.

The corresponding retardation of phase for each foot of descent will be 1·758 in circular measure, which is equivalent to about 102 days ; and the retardation for three feet will be 306 days.

It is quite obvious then that the daily range at the surface is altogether inappreciable at 3 feet, and *à fortiori* at greater depths. Hence the daily variation in the readings of the deep-sunk thermometers, as recorded in the *Observations* for 1846–7, must be owing to changes of temperature in their stems. As an approximate verification of this assertion, we will take two instances from the *Observations* for 1847; and to obviate the necessity of applying the correction mentioned in *Introduction to Greenwich Meteorological Observations*, page lxxi, we shall, in each instance, select the month in which the maximum occurs.

In September of that year the highest and lowest mean readings at even hours of Göttingen time, were—

For Thermometer in Air (Table xxxii),

Highest	62·3	at 4^h
Lowest	48·8	,, 18^h
Showing a difference of	13·5	

For 12 ft. Thermometer (Table xxiv),

Highest	55·16	at 2^h
Lowest	55·06	,, 16^h and 18^h
Showing a difference of	·10	

The mean reading of the 12 ft. thermometer for the month was 55·11; and as the lowest degree on its scale is 42·0, the mean length of the column exposed to air was 13·11. Since the expansion of alcohol for 1° Fahrenheit is ·000555, we have

$$13{\cdot}11 \times 13{\cdot}5 \times {\cdot}000555 = {\cdot}098$$

for the daily range due to the temperature of the portion of stem exposed to air; which agrees with the difference ·10, shown by the observations.

Again, in August of the same year, we have—

For Thermometer in Air,

Highest	72·6	at 4^h
Lowest	56·2	,, 18^h
Difference	16·4	

For 3 ft. Thermometer,

Highest	62·50	at 4^h
Lowest	62·22	,, 18
Difference	·28	

Length of column exposed to air $62{\cdot}34 - 34{\cdot}2 = 28{\cdot}14$, and $28{\cdot}14 \times 16{\cdot}4 \times {\cdot}000555 = {\cdot}26$, which nearly agrees with the difference ·28 found above.

The values of P_1, P_2, E_1, E_2, for any depth other than 3, 6, 12, or 24 feet, may be found by taking the values of these coefficients for the nearest of the 4 thermometers, and using the equations

Difference of $\log_e P_1$ = difference of E_1 = ·092 × difference of depth.
Difference of $\log_e P_2$ = difference of E_2 = ·092 × $\sqrt{2}$ × difference of depth.

The mean temperature of a horizontal stratum of given thickness may be derived from the expression for the temperature of its centre, by the following rule. Let the product of ·092 or $\sqrt{\frac{\pi c}{k}}$ by half the thickness of the stratum be denoted by z, and let the values of P_1, P_2, E_1, E_2, for the centre of the stratum be given; then

P_1 must be multiplied by $1 + \frac{1}{45} z^4 - \frac{1}{5670} z^8$ nearly.

P_2 ,, ,, $1 + \frac{4}{45} z^4 - \frac{16}{5670} z^8$,,

E_1 must be increased by $\tan^{-1}\left(\frac{1}{3} z^2 + \frac{1}{105} z^6\right)$,,

E_2 ,, ,, $\tan^{-1}\left(\frac{2}{3} z^2 + \frac{8}{105} z^6\right)$,, When the stratum is 1 French foot in thickness, it will be found that the multiplier for P_1 is 1·000001, and the correction for E_1 is 2′. 25″. Hence we may form some idea of the corrections due to the lengths of the bulbs (10 or 12 inches). It is obvious that these corrections will be very small; and they will be the same for all the thermometers, except in so far as the bulbs differ in length.

The Tables on the latter half of p. (ccviii) have been derived from graphical projection in the following manner:— The monthly means of each thermometer p. (cciii) were made the ordinates of a curve at 12 equidistant points in the line of abscissæ, the curve itself being carefully drawn by hand through the 12 points thus determined. The two points at which the curve intersected the line of mean annual temperature were marked, and are entered in the first Table under the names (derived from an obvious analogy) of vernal and autumnal means. The days midway between these were taken as the centres of warm and cold halves of the year; this part of the calculation being checked by comparison with the values of E_1 (p. (cciii)), which in no case differed by more than a day from the values found graphically. The "highest" and "lowest" temperatures, in the last Table on the same page, were determined graphically, and the numbers in the remaining columns (except "Mean of Year") were derived from them. It will be observed that in every instance the temperature rises higher above the mean than it falls below; but the number of days below the mean is greater than the number above.

I have inadvertently omitted above to call attention to the decrease of temperature, with increase of depth, which the thermometers exhibit. This is especially evident from the values of A_0, p. (ccvi), which show that in each of the periods the temperature has been higher at 3 than at 12 feet, and higher at 12 than at 24 feet. As, however, the mean temperature of Greenwich (49°·27, I believe,) is less than the lowest of these, it may be that the years which our observations cover have been exceptionally warm.

J. D. EVERETT.

NOTE BY THE ASTRONOMER ROYAL.

From the establishment of the thermometers to the middle of the year 1857, the excess of fluid in the 6-feet and 3-feet thermometers was such that, when the temperature shown by the 6-feet thermometer rose above 57°·5, or that of the 3-feet thermometer rose above 64°·5, a portion of the fluid passed into the upper bulb.

On 1857, June 22, Mr. Negretti removed from each of these thermometers a quantity of fluid, corresponding to the extent of 5° on its scale; and the scales of the two thermometers were lowered by that quantity, making the readings the same as before.

It appears now that the amount of fluid removed was a little too great. When the temperature of the 6-feet thermometer falls below 43°·5, or that of the 3-feet thermometer below 39°·7, the fluid sinks into the capillary tube.

It appears probable that the observations of the thermometers in their present state will ultimately give material assistance for the completion of the defective higher readings in their former state, and that the readings of the thermometers in their former state enable us to supply the lower readings which are wanting in their present state.

I am unable to suggest any conjectural explanation of the change of mean annual temperature and of law of annual temperature pointed out in page (cxcvii), line 31.

G. B. AIRY.

TABULAR STATEMENT OF RESULTS.

MEAN READINGS of THERMOMETER 24 French feet deep.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
1846	..	..	..	48·95	48·78	48·86	49·39	50·30	51·24	52·19	52·60	52·53	..
1847	52·05	51·18	50·19	49·34	48·83	48·69	49·09	49·81	50·64	51·34	51·72	51·79	50·39
1848	51·47	50·92	50·08	49·39	49·07	49·15	49·68	50·41	51·19	51·81	52·16	52·04	50·61
1849	51·54	50·89	50·15	49·57	49·14	49·01	49·42	50·22	50·97	51·67	52·04	52·03	50·55
1850	51·57	50·83	49·99	49·32	48·87	48·79	49·10	49·81	50·65	51·29	51·63	51·54	50·28
1851	51·16	50·55	49·86	49·18	48·76	48·74	49·07	49·78	50·60	51·34	51·72	51·71	50·21
1852	51·16	50·46	49·79	49·15	48·71	48·69	49·04	49·77	50·77	51·68	52·20	52·09	50·29
1853	51·66	51·11	50·46	49·62	48·94	48·78	49·12	49·88	50·73	51·48	51·83	51·70	50·44
1854	51·09	50·22	49·38	48·74	48·42	48·49	48·88	49·57	50·40	51·16	51·61	51·57	49·96
1855	51·02	50·32	49·48	48·53	47·95	47·85	48·21	49·01	49·93	50·77	51·40	51·38	49·65
1856	50·75	49·93	49·13	48·53	48·10	48·08	48·53	49·32	50·32	51·15	51·58	51·60	49·75
1857	51·05	50·26	49·37	48·65	48·24	48·23	48·72	49·64	50·68	51·69	52·29	52·34	50·10
1858	51·97	51·36	50·50	49·54	48·92	48·85	49·30	50·22	51·12	51·91	52·27	52·23	50·68
1859	51·71	51·02	50·29	49·71	49·43	49·41	49·82	50·71	51·70	52·51	(52·94)	52·76	51·00

MEAN READINGS of THERMOMETER 12 French feet deep.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
1846	..	..	..	47·17	48·06	50·49	53·68	55·55	56·57	56·55	54·71	52·21	..
1847	48·98	46·73	45·78	45·81	46·81	49·50	51·92	54·22	55·11	54·58	53·61	51·82	50·41
1848	49·64	47·39	46·57	46·92	48·28	50·90	53·01	54·70	55·28	55·07	53·43	51·19	51·03
1849	49·20	47·89	47·11	46·92	47·46	49·92	52·63	54·51	55·50	55·20	53·73	51·52	50·97
1850	48·80	46·68	46·37	46·17	47·19	49·26	51·96	54·06	54·88	54·38	52·67	50·87	50·27
1851	48·84	47·50	46·35	46·29	47·29	49·24	51·88	54·02	55·30	54·98	53·46	50·55	50·47
1852	48·43	47·21	46·23	46·15	47·34	49·32	51·85	54·90	56·07	55·39	53·48	51·90	50·69
1853	50·40	48·68	46·65	45·99	46·85	49·20	51·97	53·97	55·00	54·57	53·23	50·56	50·59
1854	47·56	46·22	45·59	46·07	47·56	49·31	51·45	53·71	55·11	55·08	53·22	50·61	50·12
1855	48·53	46·44	44·61	44·50	46·06	48·04	50·91	53·40	54·75	54·78	53·26	50·63	49·66
1856	47·69	46·39	45·87	45·76	46·89	48·87	51·64	54·12	55·33	54·89	53·49	50·87	50·15
1857	48·50	46·49	45·62	45·82	46·84	49·45	52·58	55·08	56·44	56·26	54·88	52·80	50·90
1858	50·62	48·22	46·16	46·00	47·41	49·91	53·29	55·22	56·21	56·03	54·24	51·35	51·22
1859	49·27	47·87	47·43	47·67	48·43	50·67	53·69	56·35	(57·07)	56·51	54·66	51·48	51·76

MEAN READINGS of THERMOMETER 6 French feet deep.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
1846	..	..	..	47·46	49·94	(55·87)	(58·25)	(58·99)	(59·23)	(56·99)	52·79	47·97	..
1847	43·98	42·85	43·27	45·12	48·64	53·94	(57·08)	(58·91)	(57·83)	55·36	52·76	49·48	50·77
1848	45·80	44·26	44·93	47·45	51·09	55·28	(57·99)	(58·87)	(57·78)	55·78	51·07	48·73	51·59
1849	45·99	45·67	45·56	46·09	49·14	54·50	(57·67)	(58·31)	(58·06)	55·75	52·64	48·15	51·46
1850	44·22	43·96	44·79	45·85	48·54	53·61	(57·06)	(58·92)	(57·59)	54·69	51·16	48·08	50·71
1851	46·27	44·79	44·33	46·19	48·86	53·22	57·14	(58·87)	(58·48)	56·08	51·35	47·10	51·06
1852	45·43	44·97	43·98	46·30	49·53	52·73	(57·72)	(59·29)	(59·17)	55·24	52·26	49·98	51·38
1853	48·21	45·21	43·53	45·18	48·45	53·46	(57·11)	(58·86)	(58·00)	55·11	51·78	46·79	50·97
1854	43·30	43·95	44·22	47·13	49·80	52·91	56·22	(58·91)	(58·59)	56·12	51·29	47·31	50·81
1855	45·46	42·17	41·79	44·47	48·07	51·98	56·86	(58·83)	(58·31)	56·42	51·57	46·84	50·23
1856	44·38	44·22	44·42	46·12	48·60	53·29	57·05	(58·84)	(58·61)	56·09	51·88	47·79	50·94
1857	45·08	43·15	44·14	46·14	49·00	54·82	58·95	61·27	60·94	57·86	54·42	50·76	52·21
1858	47·47	44·46	(43·00)	46·22	49·76	55·88	59·32	60·69	60·03	57·65	52·24	48·38	52·09
1859	46·39	45·91	46·86	48·06	50·42	55·82	60·43	(62·38)	60·25	58·04	52·17	47·49	52·85

MEAN READINGS of THERMOMETER 3 French feet deep.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
1846	..	..	..	47·66	52·15	61·72	62·95	63·61	62·45	55·44	50·22	42·71	..
1847	39·35	39·65	41·17	44·46	51·17	57·24	61·56	62·34	57·82	54·73	50·63	46·46	50·55
1848	41·28	42·00	43·30	47·72	54·34	58·36	61·21	60·15	58·45	54·75	47·53	45·88	51·25
1849	42·55	43·28	43·56	44·86	51·15	58·36	61·69	61·44	60·11	54·42	49·75	44·08	51·27
1850	39·13	41·87	42·36	46·04	49·50	57·84	60·65	61·26	57·97	52·98	48·85	44·21	50·22
1851	43·62	41·80	42·26	45·84	49·97	56·63	60·73	62·76	59·52	55·32	46·63	43·39	50·71
1852	42·17	42·21	41·49	46·33	51·24	55·07	(63·70)	(63·41)	60·60	52·84	50·57	47·55	51·43
1853	45·16	40·50	40·35	44·57	50·16	56·59	60·10	61·51	58·49	53·94	48·14	41·92	50·12
1854	39·25	41·15	42·61	48·09	51·08	55·52	59·90	61·63	61·17	54·51	47·48	43·38	50·48
1855	41·48	36·94	39·05	44·64	49·25	55·12	61·43	62·03	60·05	55·66	47·97	41·52	49·60
1856	41·39	41·66	42·22	46·26	49·57	56·85	61·01	(63·90)	59·32	55·37	48·24	44·13	50·83
1857	41·33	40·22	42·67	46·23	51·19	59·16	62·82	64·76	61·76	56·45	51·46	47·21	52·11
1858	42·23	39·84	(40·00)	46·29	51·03	61·65	62·73	63·82	61·28	56·52	47·37	44·57	51·46
1859	42·76	43·53	45·69	47·22	51·89	60·07	65·72	65·32	60·28	56·80	47·74	42·24	52·44

MEAN READINGS of THERMOMETER 1 inch deep.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°		°
1846	..	..	..	..	..	64·2	64·8	64·7	62·2	52·2	47·7	36·2	..
1847	37·9	38·0	42·3	46·4	56·7	59·8	66·8	63·9	56·0	53·7	48·4	44·0	51·16
1848	37·4	44·1	44·6	49·5	61·6	61·7	65·0	60·8	58·8	53·5	45·5	45·5	52·33
1849	41·5	43·6	44·3	46·3	56·5	63·3	65·0	65·2	61·8	53·0	46·5	41·1	52·34
1850	36·7	44·4	41·9	50·4	53·0	64·1	65·2	63·0	58·7	49·5	48·7	42·7	51·52
1851	44·2	42·7	44·0	48·5	54·8	62·2	63·8	65·5	60·0	54·7	41·2	42·2	51·98
1852	42·8	42·0	43·0	49·9	55·1	59·4	71·0	65·2	61·1	50·2	50·4	48·0	53·18
1853	44·3	37·0	41·8	47·4	55·7	62·3	63·2	64·1	60·3	55·1	44·9	38·0	51·18
1854	40·6	41·6	45·3	52·7	54·2	59·8	64·4	64·6	61·6	52·9	44·1	42·9	52·06
1855	38·4	33·4	41·0	48·9	52·9	61·3	65·6	66·0	60·9	54·7	44·3	38·3	50·48
1856	41·5	43·3	41·7	50·4	52·6	63·0	64·8	66·7	59·0	54·5	43·9	41·9	51·94
1857	38·9	40·7	43·7	48·3	57·6	65·6	67·0	67·9	62·5	55·2	48·8	46·6	53·57
1858	39·6	37·8	42·2	49·6	54·3	68·6	64·5	66·0	62·7	54·2	42·2	42·4	52·01
1859	42·4	43·5	47·3	49·3	55·8	64·4	70·7	66·7	59·7	54·4	44·3	39·3	53·15

MEAN READINGS of THERMOMETER in Air.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°			°	°	°		°
1846	..	..	..	..	..	..	65·4	64·4	61·4	50·9	46·5	33·4	..
1847	36·4	36·4	42·0	46·0	57·4	59·2	66·9	63·4	55·0	53·2	47·3	42·9	50·51
1848	36·3	45·8	46·2	52·1	68·0	63·9	68·7	63·0	63·3	55·3	45·7	46·5	54·05
1849	41·9	45·8	46·8	49·1	60·6	68·5	68·8	69·4	65·3	55·8	47·5	40·6	55·01
1850	35·9	47·3	45·0	54·0	56·3	69·7	68·7	67·0	63·4	52·2	49·5	42·5	54·29
1851	45·5	44·3	46·8	51·5	59·1	68·2	67·8	70·6	64·7	57·3	41·6	41·7	54·92
1852	44·1	44·2	47·3	55·5	59·1	62·4	77·4	68·5	63·3	52·5	51·6	49·0	56·24
1853	44·8	37·2	43·7	50·3	61·4	66·9	67·5	68·7	62·2	55·9	45·6	36·4	53·38
1854	41·7	44·4	50·1	59·4	58·9	63·5	68·8	69·1	68·0	56·7	43·9	43·1	55·63
1855	38·4	34·0	43·7	54·6	56·3	66·3	69·1	70·6	65·2	57·1	44·3	37·8	53·12
1856	41·8	45·1	43·1	55·3	55·5	68·3	69·0	71·4	63·3	57·2	43·7	42·8	54·67
1857	38·6	44·6	47·3	51·3	63·7	72·6	73·3	73·5	66·7	58·4	49·1	48·0	57·26
1858	41·0	39·4	46·6	55·6	60·0	76·4	68·3	73·5	67·6	56·9	43·0	42·7	55·92
1859	43·9	47·2	51·0	53·9	62·4	70·3	77·6	74·2	63·9	56·5	46·5	39·8	57·27

MEAN READINGS for the PERIOD 1847–1859 (13 Years).

Thermometer.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
24 ft.	51°·40	50°·70	49°·90	49°·17	48°·72	48°·67	49°·08	49°·86	50°·75	51°·52	51°·95	51°·91	50°·30
12 ft.	48·96	47·21	46·18	46·16	47·26	49·51	52·21	54·48	55·54	55·21	53·64	51·24	50·63
6 ft.	45·54	44·27	44·22	46·18	49·22	53·96	57·74	59·46	58·74	56·17	52·05	48·22	51·31
3 ft.	41·67	41·13	42·06	46·04	50·89	57·57	61·79	62·64	59·76	54·95	48·64	44·35	50·96
Inch..	40·48	40·93	43·32	49·05	55·45	62·73	65·92	65·05	60·24	53·51	45·63	42·53	52·07
Air ..	40·78	42·75	46·12	52·97	59·90	67·40	70·15	69·45	63·99	55·77	46·18	42·56	54·84

VALUES of the COEFFICIENTS in the EXPRESSIONS—

$$v = A_0 + A_1 \,.\, \cos t + B_1 \,.\, \sin t + A_2 \,.\, \cos 2t + B_2 \,.\, \cos 2t. \qquad (1)$$

$$v = A_0 + P_1 \,.\, \sin (t + E_1) + P_2 \,.\, \sin (2t + E_2). \qquad (2)$$

Thermometer.	A_0	A_1	B_1	A_2	B_2	P_1	E_1	P_2	E_2
24 ft.........	50°·30	+ 1°·1738	− 1°·1805	− 0·05	− 0·0058	1°·6647	135° 10′	0°·0503	263° 25′
12 ft.........	50·63	− 1·5897	− 4·5302	− 0·0483	+ 0·254	4·8010	199. 20	0·259	349. 14
6 ft..........	51·31	− 6·0285	− 4·9568	+ 0·295	+ 0·468	7·8047	230. 34	0·553	392. 15
3 ft..........	50·96	− 10·029	− 4·4058	+ 0·773	+ 0·598	10·954	246. 17	0·977	412. 18
Inch..........	52·07	− 12·865	− 2·095			13·033	260. 45		
Air...........	54·84	− 14·966	− 1·221			15·013	265. 20		

NAPIERIAN LOGARITHMS of P_1 and P_2, and VALUES of E_1 and E_2 in circular measure $\left(\frac{\text{arc}}{\text{radius}}\right)$.

Thermometer.	$\log_e P_1$	E_1	$\log_e P_2$	E_2
24 ft......	0·50966	2·35905	− 2·989	4·597
12 ft......	1·56883	3·47907	− 1·353	6·095
6 ft.......	2·05473	4·02424	− 0·593	6·846
3 ft.......	2·39369	4·29846	− 0·023	7·196
Inch......	2·56750	4·55094		
Air	2·70890	4·63099		

Taking the differences of the values of $\log_e P_1$ for each pair of thermometers, also the differences of the values of E_1, and dividing in each case by the difference of depth, we obtain the following quotients, which are determinations of the value of $\sqrt{\frac{\pi c}{k}}$, c being the capacity for heat, and k the conductivity.

Thermometers compared.	Difference of $\log_e P_1$ divided by Difference of depth.	Difference of E_1 divided by Difference of depth.
24 ft. and 12 ft.	·0883	·0933
24 ,, 6 ,,	·0858	·0925
24 ,, 3 ,,	·0897	·0924
12 ,, 6 ,,	·0810	·0909
12 ,, 3 ,,	·0917	·0910
6 ,, 3 ,,	·1130	·0914
Means	·09158	·09192

To obtain determinations of the value of $\sqrt{\frac{\pi c}{k}}$ from the values of $\log_e A_2$ and E_2, we must first proceed as above, and divide the results by $\sqrt{2}$, as shown below :—

Thermometers compared.	Diff. of $\log_e P_2$ divided by Diff. of depth.	Quotients by $\sqrt{2}$.	Diff. of E_2 divided by Diff. of depth.	Quotients by $\sqrt{2}$.
24 ft. and 12 ft.	·1364	·0964	·1248	·0882
24 ,, 6 ,,	·1331	·0941	·1249	·0883
24 ,, 3 ,,	·1412	·0998	·1237	·0875
12 ,, 6 ,,	·1267	·0896	·1251	·0885
12 ,, 3 ,,	·1477	·1044	·1223	·0865
6 ,, 3 ,,	·1899	·1343	·1166	·0824
Means	....	·1031	....	·0869

The mean of ·09158 and ·09192 is ·09175,

The mean of ·1031 and ·0869 is ·0950,

and the former of these means is entitled to much more weight than the latter, the coefficients of the half-yearly term being too small, and too variable from year to year, to furnish accurate determinations.

CORRECTIONS for TEMPERATURE of that portion of STEM which is above the bottom of the scale, or above the capillary tube.

Argument, $(v - V) \times (v - v') \times {}$·000555; v being the temperature of bulb, or the actual reading ; V the temperature of air ; and v' the degree of the bottom of the scale. The values of v' are—

For the 24 ft. thermometer, 43°
,, 12 ,, 42°

For the 6 ft. thermometer, 39°
,, 3 ,, 34°

Thermometers.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
24 ft.	+ °·05	+ °·03	+ °·01	− °·01	− °·04	− °·06	− °·07	− °·07	− °·06	− °·02	+ °·03	+ °·05
12 ,, ...	+ ·03	+ ·01	·00	− ·02	− ·04	− ·08	− ·11	− ·10	− ·06	·00	+ ·05	+ ·05
6 ,, ...	+ ·02	·00	− ·01	− ·03	− ·06	− ·11	− ·13	− ·11	− ·06	·00	+ ·04	+ ·03
3 ,, ...	·00	·00	− ·02	− ·04	− ·09	− ·12	− ·13	− ·10	− ·06	− ·01	+ ·02	+ ·01

The sign + denotes that the correction is to be added to the observed reading.
[In strictness, these numbers do not apply after 1857, June.—G. B. A.]

ASSUMED CORRECTIONS for TEMPERATURE of that portion of STEM (capillary tube) which is below ground.

Thermometers.	January.	February.	March.	April.	May	June.	July.	August.	September.	October.	November.	December.
24 ft.	+ °·03	+ °·04	+ °·03	+ °·02	°·00	− °·02	− °·04	− °·05	− °·04	− °·02	°·00	− °·02
12 ,, ...	+ ·02	+ ·02	+ ·01	·00	− ·01	− ·03	− ·04	− ·03	− ·02	·00	+ ·01	+ ·02
6 ,, ...	+ ·01	+ ·01	+ ·01	·00	− ·01	− ·01	− ·01	− ·01	·00	·00	+ ·01	+ ·01
3 ,, ...	·00	·00	·00	·00	·00	·00	·00	·00	·00	·00	·00	·00

CORRECTIONS for INEQUALITY of CALENDAR MONTHS, obtained by reckoning the 31st of January and the 1st of March as part of February.

Thermometers.	January.	February.	March.
24 ft.......	+ °·01	°·00	+ °·01
12 ,, ...	+ ·04	·00	− ·02
6 ,, ...	+ ·03	·00	+ ·01
3 ,, ...	+ ·02	·00	+ ·04

CORRECTED MEANS for the PERIOD 1847–1859.

Thermometers.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
24 ft.	51·49	50·77	49·95	49·18	48·68	48·59	48·97	49·74	50·65	51·48	51·98	51·64	50·28
12 ,,	49·05	47·24	46·17	46·14	47·21	49·40	52·06	54·35	55·46	55·21	53·70	51·31	50·61
6 ,,	45·60	44·28	44·23	46·15	49·15	53·84	57·60	59·34	58·68	56·17	52·10	48·26	51·28
3 ,,	41·69	41·13	42·08	46·00	50·80	57·45	61·66	62·54	59·70	54·94	48·66	44·36	50·92

CORRECTED VALUES of COEFFICIENTS.

Thermometers.	A_0.	A_1.	B_1.	A_2.	B_2.	P_1.	E_1.	P_2.	E_2.
	°	°	°	°	°	°	° ′	°	° ′
24 feet...	50·28	+1·2688	−1·1540	−0·0517	−0·01154	1·7151	132. 17	0·0530	257. 25
12 ,, .	50·61	−1·4856	−4·5410	−0·060	+0·231	4·7778	198. 7	0·239	345. 26
6 ,, .	51·28	−5·9375	−4·9715	+0·277	+0·459	7·7443	230. 4	0·536	391. 7
3 ,, .	50·92	−9·9547	−4·4176	+0·755	+0·603	10·891	246. 4	0·966	411. 23

CORRECTED VALUES of $\log_e P_1$, $\log_e P_2$, and of E_1 and E_2, in CIRCULAR MEASURE.

Thermometers.	$\text{Log}_e P_1$.	E_1.	$\text{Log}_e P_2$.	E_2.
24 feet..........	·53947	2·30885	− 2·9381	4·4928
12 ,, ...	1·56398	3·45779	− 1·4327	6·0289
6 ,, ...	2·04694	4·01531	− ·6235	6·8263
3 ,, ...	2·38794	4·29472	− ·0343	7·1800

Thermometers compared.	Diff. of $\log_e P_1$ divided by Diff. of Depth.	Diff. of E_1 divided by Diff. of Depth.	
24 feet and 12 feet	·0854	·0957	The mean of ·09048 and ·09402 is ·09225.
24 ,, 6 ,, ...	·0838	·0948	
24 ,, 3 ,, ...	·0880	·0946	
12 ,, 6 ,, ...	·0805	·0929	
12 ,, 3 ,, ...	·0915	·0930	
6 ,, 3 ,, ...	·1137	·0931	
Means	·09048	·09402	

Thermometers compared.	Diff. of $\log_e P_2$ divided by Diff. of Depth.	Quotients by $\sqrt{2}$.	Diff. of E_2 divided by Diff. of Depth.	Quotients by $\sqrt{2}$.	
24 feet and 12 feet	·1254	·0887	·1280	·0905	The mean of ·1036 and ·0901 is ·09685.
24 ,, 6 ,, ...	·1286	·0909	·1297	·0917	
24 ,, 3 ,, ...	·1383	·0978	·1280	·0905	
12 ,, 6 ,, ...	·1349	·0954	·1329	·0940	
12 ,, 3 ,, ...	·1554	·1099	·1279	·0904	
6 ,, 3 ,, ...	·1964	·1389	·1179	·0834	
Means	....	·1036	....	·0901	

MEANS of UNCORRECTED READINGS for the THREE PERIODS—(1) April 1846–December 1850; (2) January 1851–December 1855; (3) January 1856–December 1859.

Periods.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
24-feet Thermometer.												
1st period	51·66	50·96	50·10	49·31	48·94	48·90	49·34	50·11	50·94	51·66	52·03	51·99
2nd ,, ...	51·22	50·53	49·79	49·04	48·56	48·51	48·86	49·60	50·49	51·29	51·75	51·69
3rd ,, ...	51·37	50·64	49·82	49·11	48·67	48·64	49·29	49·97	50·96	51·82	52·27	52·23
12-feet Thermometer.												
1st period	49·16	47·17	46·46	46·60	47·56	50·01	52·64	54·61	55·47	55·16	53·63	51·52
2nd ,, ...	48·75	47·21	45·89	45·80	47·02	49·02	51·61	54·00	55·25	54·96	53·33	50·85
3rd ,, ...	49·02	47·24	46·27	46·31	47·39	49·73	52·80	55·19	56·26	55·92	54·32	51·62
6-feet Thermometer.												
1st period	45·00	44·18	44·64	46·39	49·47	54·64	57·61	58·80	58·10	55·71	52·08	48·48
2nd ,, ...	45·73	44·22	43·57	45·85	48·94	52·86	57·01	58·95	58·51	55·79	51·65	47·60
3rd ,, ...	45·83	44·44	44·92	46·64	49·44	54·95	58·94	60·80	59·96	57·41	52·68	48·60
3-feet Thermometer.												
1st period	40·58	41·70	42·60	46·15	51·66	58·70	61·61	61·76	59·36	54·46	49·40	44·67
2nd ,, ...	42·34	40·52	41·15	45·89	50·34	55·79	61·17	62·27	59·97	54·45	48·16	43·55
3rd ,, ...	41·93	41·31	42·64	46·50	50·92	59·43	63·07	64·45	60·66	56·28	48·70	44·54

VALUES of COEFFICIENTS derived from the above.

Thermometers and Periods.		A_0.	P_1.	$\text{Log}_e P_1$.	E_1 in degrees.	E_1 in Circular Measure.
		°	°	°	° ′	
24 feet	1st period	50·50	1·6186	0·48154	135. 4	2·35730
	2nd ,, ...	50·11	1·6399	0·49461	133. 16	2·32599
	3rd ,, ...	50·38	1·8280	0·60322	138. 58	2·42547
12 feet	1st period	50·83	4·6626	1·53958	201. 8	3·51044
	2nd ,, ...	50·31	5·7336	1·55468	197. 48	3·45226
	3rd ,, ...	51·01	5·1726	1·64338	199. 54	3·48877
6 feet	1st period	51·26	7·5509	2·02167	232. 41	4·06099
	2nd ,, ...	50·89	7·6413	2·03357	229. 12	4·00029
	3rd ,, ...	52·05	8·3247	2·11923	230. 45	4·02720
3 feet	1st period	51·05	10·773	2·37701	248. 19	4·33394
	2nd ,, ...	50·47	10·830	2·38231	244. 45	4·27155
	3rd ,, ...	51·70	11·646	2·45493	246. 45	4·30650

Thermometers compared.	Difference of log P₂ divided by Difference of Depth.			Difference of E₂ divided by Difference of Depth.		
	1st Period.	2nd Period.	3rd Period.	1st Period.	2nd Period.	3rd Period.
24 feet and 12 feet	·08817	·08864	·08668	·09608	[illegible]	·08861
24 ,, 6 ,,	·08556	·08550	·08422	·09464	[illegible]	·08898
24 ,, 3 ,,	·09026	·08989	·08818	·09412	·09265	[illegible]
12 ,, 6 ,,	·08035	·07982	·07731	·09176	·09184	·08974
12 ,, 3 ,,	·09305	·09166	·09217	·09150	·09103	·09086
6 ,, 3 ,,	·11845	·11625	·11190	·09098	·09042	·09310
Means	·09264	·09196	·09008	·09318	·09205	·09014

The Mean of ·09264 and ·09318 is ·09291.
,, ·09196 ,, ·09205 ,, ·09200.
,, ·09008 ,, ·09014 ,, ·09011.

COEFFICIENTS of the TERM whose PERIOD is ONE-THIRD of a YEAR.

Thermometers.	A₃.	B₃.	P₃.	Log. P₃.	E₃ in Degrees.	E₃ in Circular Measure.
	°	°	°		° ′	
24 feet	− 0·0133	− 0·0333	0·0359	− 3·3281	201. 47	3·5218
12 ,,	− 0·035	+ 0·00833	0·0360	− 3·3247	283. 23	4·9460
6 ,,	− 0·0833	+ 0·09	0·1226	− 2·0988	317. 13	5·5365
3 ,,	− 0·035	+ 0·1033	0·1091	− 2·2158	341. 17	5·9565

Thermometers compared.	Diff. of log$_e$ P₃ divided by Diff. of Depth.	Quotients by $\sqrt{3}$ or Values of $\sqrt{\frac{\pi c}{k}}$.	Diff. of E₃ divided by Diff. of Depth.	Quotients by $\sqrt{3}$ or Values of $\sqrt{\frac{\pi c}{k}}$.
24 feet and 12 feet	·0003	·0002	·1187	·0685
24 ,, 6 ,,	·0683	·0394	·1119	·0646
24 ,, 3 ,,	·0530	·0306	·1159	·0669
12 ,, 6 ,,	·2043	·1180	·0984	·0568
12 ,, 3 ,,	·1232	·0711	·1123	·0648
6 ,, 3 ,,	− ·0390	− ·0225	·1400	·0808
Means	....	·0395	....	·0671

The Mean of ·0395 and ·0671 is ·0533.

COEFFICIENTS of the TERM whose PERIOD is ONE-FOURTH of a YEAR.

Thermometers.	A₄.	B₄.	P₄.	Log$_e$ P₄.	E₄ in Degrees.	E₄ in Circular Measure.
	°	°	°		° ′	
24 feet	− 0·005	+ 0·00577	0·00764	− 4·8747	− 40. 55	− 0·7141
12 ,,	+ 0·0667	+ 0·0231	0·0706	− 2·6507	+ 70. 54	+ 1·2374
6 ,,	+ 0·0967	− 0·0202	0·0988	− 2·3147	101. 48	1·7768
3 ,,	+ 0·155	− 0·0663	0·1685	− 1·7808	173. 10	3·0223

Thermometers compared.	Diff. of log$_e$ P₄ divided by Diff. of Depth.	Quotients by 2 or Values of $\sqrt{\frac{\pi c}{k}}$.	Diff. of E₄ divided by Diff. of Depth.	Quotients by 2 or Values of $\sqrt{\frac{\pi c}{k}}$.
24 feet and 12 feet	·1853	·0926	·1626	·0813
24 ,, 6 ,,	·1422	·0711	·1384	·0692
24 ,, 3 ,,	·1473	·0737	·1779	·0890
12 ,, 6 ,,	·0560	·0280	·0898	·0449
12 ,, 3 ,,	·0967	·0484	·1983	·0992
6 ,, 3 ,,	·1781	·0890	·4153	·2076
Means	....	·0671	....	·0985

The Mean of ·0671 and ·0985 is ·0828.

CORRECTIONS necessary to reduce CALCULATED to ACTUAL TEMPERATURES (corrected).

I. When only the Annual Term is employed.

Thermometers.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
24 feet	− °·06	+ °·03	+ °·03	+ °·05	+ °·03	− °·01	− °·04	− °·02	+ °·01	+ °·05	+ °·07	− °·02
12 ,,	− ·07	+ ·19	+ ·24	+ ·07	− ·21	− ·23	− ·04	+ ·18	+ ·17	+ ·06	− ·10	− ·28
6 ,,	+ ·26	+ ·62	+ ·22	− ·16	− ·79	− ·09	+ ·38	+ ·44	+ ·13	− ·08	− ·52	− ·37
3 ,,	+ ·72	+1·04	− ·03	− ·50	−1·27	+ ·12	+ ·79	+ ·79	− ·03	− ·40	−1·11	− ·15

II. When the Annual and Half-yearly Terms are employed.

Thermometers.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
24 feet	− °·01	+ °·01	+ °·01	°·00	− °·01	+ °·01	+ °·01	+ °·02	− °·01	°·00	+ °·03	°·00
12 ,,	− ·01	+ ·02	+ ·01	+ ·01	− ·04	·00	+ ·02	+ ·01	− ·06	·00	+ ·07	− ·05
6 ,,	− ·02	+ ·08	− ·04	+ ·12	− ·25	+ ·17	+ ·10	− ·10	− ·13	+ ·20	+ ·02	− ·11
3 ,,	− ·03	+ ·44	− ·16	+ ·25	− ·67	+ ·25	+ ·04	+ ·19	− ·16	+ ·35	− ·31	− ·02

DATES of the CENTRES of the WARM and COLD HALVES of the YEAR, for each THERMOMETER, and DAYS whose TEMPERATURE is equal to the MEAN of the YEAR (for uncorrected readings).

Thermometers.	Centre of Warm.	Centre of Cold.	Vernal Mean.	Autumnal Mean.	Days from Vernal to Autumnal.	Days from Autumnal to Vernal.
Air	July 21	January 20	April 24	October 18	177	188
Inch	,, 26	,, 24	,, 30	,, 21	174	191
3 feet	August 9	February 8	May 15	November 3	172	193
6 ,,	,, 25	,, 24	,, 30	,, 21	175	190
12 ,,	September 25	March 27	June 28	December 23	178	187
24 ,,	November 30	June 1	September 1	February 28	180	185

The application of the corrections (p. (cciv.)) will produce a retardation of 3 days for the 24-feet Thermometer, and of 1 day for the 12-feet Thermometer.

TABLE showing the RANGE of the ANNUAL CURVE of TEMPERATURE for each THERMOMETER (uncorrected).

Thermometers.	Highest.	Lowest.	Mean of Year.	Highest above Mean.	Lowest below Mean.	Range.
Air	°70·2	°40·4	°54·8	°15·4	°14·4	°29·8
Inch	66·2	40·8	52·1	14·1	11·3	25·4
3 feet	62·8	41·1	51·0	11·7	9·9	21·7
6 ,,	59·5	44·1	51·3	8·2	7·2	15·4
12 ,,	55·5	46·0	50·6	4·9	4·6	9·5
24 ,,	52·0	48·6	50·3	1·7	1·7	3·4

The numbers in this Table are for monthly means, understanding by a month any period of 30 or 31 days. The ranges, and departures, above and below mean of year, will be greater for daily means, by about 1 per cent.

The effect of the corrections (p. (cciv.)) will be to increase the range by a tenth of a degree for the 24-feet Thermometer, and diminish it by the same amount for the 3-feet, 6-feet, and 12-feet Thermometers.